BBCS BRAZILIAN BREAST CANCER SYMPOSIUM 2022

May 12 - 14, 2022

OFFICIAL PROGRAM

@bbcsoficial

MESSAGE FROM THE ORGANIZING COMMITTEE

Unfortunately, due to the COVID-19 pandemic we will have another online edition of the BBCS. The BBCS 2021 online edition brought an innovative and challenging experience for the entire group. In 2022, we come with a background in virtual events and certain that we will be able to hold another successful edition for all attendees, speakers and researchers from 81 countries joining BBCS 2022.

In the current online edition, it was possible to expand the faculty, mainly for the educational component, turning BBCS into a unique multidisciplinary experience and broad globalization.

Another important aspect is the coverage, as it was possible to increase fourfold the number of participants to roughly 2000 people.

As in previous years, the scientific program was carefully thought out and the speakers were chosen based on scientific merit in publications or didactics. On Thursday, the program was extensively revised and expanded, allowing several partners in the multidisciplinary setting to present news and advancements encompassing the treatment of breast cancer. On that day, each participant can choose the room they want to attend, being able to change rooms in the workshop if they are interested in participating in any other activity. On-demand presentations displayed on the platform will be available and can be accessed at any time. On Friday and Saturday there will be a plenary session in a single room with unpublished studies that will be presented according to their scientific merit and profiled with the presentation of renowned researchers and professors, invited due to their expertise and publications in the area. In order to promote scientific production, the award was changed, allowing a greater number of authors to use it for publication in impactful journals.

All abstracts will be published in a special publication of the Mastology edition in an innovative way. Posters can be displayed in a mini-presentation format and will also be on demand throughout the event. The exhibition area with booths has a privileged space and each company excelled in presenting their best portfolio with available novelties. We are sure that each participant will be able to find something new during BBCS, discuss in the chats, promoting an intense learning process while teaching through their questions and their own experience, from their homes or even at work. In addition, it will be possible to have an exclusive and fascinating continuing education experience!

I send my best regards to each of you with the certainty that we can offer better conditions to our patients for the best cancer treatment.

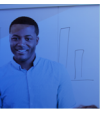
Ruffo de Freitas Junior

General Coordinator – BBCS 2022

SCHEDULE

MAY 12TH, 2022 – THURSDAY

ROOM 1 – 2 pm – 6 pm	COURSE - BRAZILIAN SCHOOL OF MASTOLOGY TRIALS IN BREAST CANCER (with translation)
ROOM 1 – 6 pm – 9:10 pm	COMPLEMENTARY THERAPY WORKSHOP
ROOM 2 – 1 pm – 9:30 pm	BREAST IMAGING, DIAGNOSIS AND MINIMAL EXCISION WORKSHOP (with translation)
ROOM 3 – 1 pm – 9:30 pm	THERANOSTIC NANOMEDICINE WORKSHOP
ROOM 4 – 1 pm – 9:30 pm	ONCOPLASTY WORKSHOP 6th STUDENTS AND ALUMNI MEETING OF THE CONTINUED EDUCATION PROGRAM ON ONCOPLASTY AND BREAST RECONSTRUCTION HOSTED BY HOSPITAL ARAÚJO JORGE AND AMARAL CARVALHO HOSPITAL (with translation)
ROOM 5 – 1 pm – 9:30	CLINICAL RESEARCH WORKSHOP
ROOM 6 – 1 pm – 5:30 pm	PALLIATIVE CARE WORKSHOP
ROOM 6 – 5:30 pm – 9:30 pm	PRECEPTORSHIP LIBBS (with translation)
ROOM 7 – 1 pm – 5 pm	SIMPÓSIO ABMasto
ROOM 7 – 5:30 pm – 9:30 pm	DA VIDA ACADÊMICA AO MERCADO DE TRABALHO
ROOM 8 – 7 pm – 9 pm	NOVARTIS



MAY 13TH, 2022 – FRIDAY

PLENARY SESSION – 1 pm – 10 pm	BRAZILIAN BREAST CANCER SYMPOSIUM 2022 (with translation)
ROOM 1 – 4:30 pm – 5 pm	SATELLITE SYMPOSIUM: MSD – INNOVATIONS IN IMMUNOTHERAPY IN THE TREATMENT OF TRIPLE NEGATIVE BREAST CANCER SPEAKER: CARLOS HENRIQUE DOS ANJOS (BRA) (only for prescribers)
ROOM 1 – 7:15 pm – 9:30 pm	COMMENTED POSTER SESSION
ROOM 2 – 2 pm – 6:15 pm	REUNIÃO DE CONSENSO LATINO-AMERICANO DE RADIOTERAPIA INTRAOPERATÓRIA DE CÂNCER DE MAMA (Watch on www.bbcs.org.br)

MAY 14TH, 2022 – SATURDAY

PLENARY SESSION – 8 am – 1 am	BRAZILIAN BREAST CANCER SYMPOSIUM 2022 (with translation)
ROOM 1 – 9:45 am – 10:15 am	SATELLITE SYMPOSIUM: ROCHE THEME 1: EVOLUTION OF HER2+ BREAST CANCER TREATMENT SPEAKER: CRISTIANO AUGUSTO ANDRADE DE RESENDE (BRA) THEME 2: TRANSFORMING THE EXPERIENCE OF WOMEN WITH CANCER HER2+ SPEAKER: JULIANA THOME RIBEIRO (BRA) (only for prescribers)

SUMMARY

SUMMARY POSTERS

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Ana Luiza Lima Sousa (BRA)

Ana Paula Thiesen (BRA)

André Gonçalves Próspero (BRA)

Andre Mattar (BRA)

André Pfob (GER)

André Sanches (BRA)

Andrii Zhygulin (UKR)

Andris Figueiroa Bakuzis (BRA)

Anna Luiza Zapalowski Galvão (BRA)

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Rachel Machado de Oliveira Portela (BRA)
Rafael Batista João (BRA)
Rafael Canfield Brianese (BRA)
Rafael Henrique Szymanski Machado (BRA)
Raghavan Vydia (GBR)
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Seema Khan (USA)
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Sergio B. Hatchbach (BRA)
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Silvio Eduardo Bromberg (BRA)
Simone Elias (BRA)
Suelen Silvana dos Santos (BRA)
Susanne Crocamo (BRA)
Taiane Francieli Rebelatto (BRA)
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Thayse Batista Moreira (BRA)
Theo Zeferino Pavan (BRA)
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Vera Aparecida Saddi (BRA)

Victor Domingos Lisita (BRA)

Vilmar Marques de Oliveira (BRA)

Vinicius Milani Budel (BRA)

Vitor Alves Marques (BRA)

Yazan Masannat (GBR)

Yuri Cardoso Rodrigues Beckedorff Bittencourt (BRA)

Zoltán Matrai (HUN)

AWARDS FOR A SCIENTIFIC PAPERS

BBCS Award

BBCS award was created to honor the contemporary researcher that most contributed to breast cancer research in Brazil and worldwide.

Maria Antonieta Regral Dutra Award

The award is granted to people who have spared no effort and dedication in controlling and treating breast cancer in Brazil and worldwide.

José Aristodemo Pinotti Award

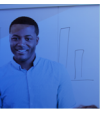
The José Aristodemo Pinotti award is given to the best paper presented during BBCS. Initially, we cover the author's flight tickers, lodging and registration to San Antonio Breast Cancer Symposium, in Texas (USA). However, with the pandemic and the event going online, the 2021 edition awarded the prize in cash. The 2022 edition will follow the same format. Wich garants the amount of R$ 12.000,00 (twelve thousand reais) destinated to the group.

Carlos Inácio de Paula Award

The Carlos Inácio de Paula award is given to the second-best paper presented during BBCS and the payment is made in cash to the group of the abstract. Wich garants the amount of R$ 5.000,00 (five thousand reais) destinated to the group.

Cláudio Kemp Award

Professor Claudio Kemp award is directed to young researchers, and given to the researcher who presented the best paper at BBCS – in the category of 'up to 35 years old'. The prize awarded is tickets, lodging and registration to the *Jornada Paulista de Mastologia* of the same year.



Unicentro Br Award

An award honoring the official financial Institution of the event – Sicoob. At first, this prize was granted to the best study conducted in the states of Goiás, Tocantins or the Federal District (or when the author was originally from one of these states). Today, the award is given to the best research work carried out in Brazil, the author being at most 45 years old at the day of the paper submission. The best paper under this category shall receive R$ 5.000,00 (five thousand reais) it will be paid to the group.

MAY 12TH, 2022 - THURSDAY

ROOM 1 COURSE - BRAZILIAN SCHOOL OF MASTOLOGY
TRIALS IN BREAST CANCER
2 pm – 6 pm

(with translation)

Coordinators: Fábio Postiglione Mansani (BRA)
Vilmar Marques de Oliveira (BRA)

PART 1 **2 pm – 2:55 pm**

Moderador: Fábio Postiglione Mansani (BRA)

2 pm – 2:20 pm How to design clinical trials in oncology?
Romualdo Barroso de Sousa (BRA)

2:20 pm – 2:40 pm Disclosure and financial interests in research and clinical study
Oladapo Yeku (USA)

2:40 pm – 2:55 pm Discussion
Daniela Dornelles Rosa (BRA)
Giuliano Santos Borges (BRA)

PART 2 **3 pm – 3:55 pm**

Moderador: André Mattar (BRA)

3 pm – 3:20 pm Most important ongoing trials in early breast cancer
Carlos Barrios (BRA)

3:20 pm – 3:40 pm	Most important ongoing trials in advanced breast cancer Carlos Henrique dos Anjos (BRA)
3:40 pm – 3:55 pm	Discussion Luiz Fernando Jubé Ribeiro (BRA) Rafael Henrique Szymanski Machado (BRA)
3:55 pm – 4:15 pm	Coffee Break

PART 3	**4:15 pm – 5:10 pm**
Moderador:	Felipe Pereira Zerwes (BRA)
4:15 pm – 4:35 pm	Most important ongoing trials in breast cancer radiotherapy Gustavo Nader Marta (BRA)
4:35 pm – 4:55 pm	Most important ongoing trials in breast cancer surgery Alastair Thompson (USA)
4:55 pm – 5:10 pm	Discussion Felipe Eduardo Martins de Andrade (BRA) Nilceana Maya Aires Freitas (BRA)

PART 4	**5:15 pm – 5:55 pm**
Moderador:	Fábio Postiglione Mansani (BRA)
5:15 pm – 5:40 pm	Trials with practice changes in the last year Otto Metzger (USA)
5:40 pm – 5:55 pm	Discussion Francisco Pimentel Cavalcante (BRA) José Luiz Pedrini (BRA) Tomás Reinert (BRA)

ROOM 1 - COMPLEMENTARY THERAPY WORKSHOP
6 pm – 9h10

Coordinators: Geraldo Silva Queiroz (BRA)
Paula Saab (BRA)

PART 1 **PAIN**

6 pm – 6:20 pm Treatment of breast cancer pain with cannabis derivatives
Frederico Barra (BRA)

6:20 pm – 6:40 pm Acupuncture, how does it work? Main indications in mastology
Rodrigo Suarez (BRA)

6:40 pm – 7 pm Discussion
Mirene Morais (BRA)
Rafael Batista João (BRA)

PART 2 **MUSIC AND AROMATHERAPY**

7:05 pm – 7:25 pm Can music therapy decrease fatigue during radiation therapy in breast cancer patients?
Tereza Raquel Alcântara-Silva (BRA)

7:25 pm – 7:45 pm Aromatherapy and music therapy improving pain intensity and anxiety in the perioperative period
Thiago da Silva Domingos (BRA)

7:45 pm – 8:05 pm Discussion
Eneida Ribeiro Marinho (BRA)
Gisele Cordeiro Castro (BRA)

PART 3 **PHYSIOTHERAPY AND EXERCISES**

8:10 pm – 8:30 pm What are the best exercise strategies to reduce the side effects of chemotherapy in breast cancer patients?
Carlos Alexandre Vieira (BRA)

8:30 pm – 8:50 pm Can bioactive compounds of pequi modulate antiproliferative activity in breast cancer cells?
Paula Becker Pertuzatti (BRA)

8:50 pm – 9:10 pm Discussion
Ana Carolina Marcondes Machado Leprevost (BRA)
Ismael Forte Freitas Junior (BRA)
Nayara Alves de Freitas Lemos (BRA)

ROOM 2 - BREAST IMAGING, DIAGNOSIS AND MINIMAL EXCISION WORKSHOP
1 pm – 9:30 pm

(with translation)

Coordinators: José Luis Esteves Francisco (BRA)
Henrique Lima Couto (BRA)

MODULE 1 **CONFERENCE**

Table coordinator: Rachel Machado de Oliveira Portela (BRA)

1 pm – 1:30 pm Breast cancer tomosynthesis screening – is time to change?
Liane Elizabeth Philpotts (USA)

1:30 pm – 1:40 pm Discussion

MODULE 2 **EDUCATIONAL SESSION – SUPPLEMENTAL X DE ESCALATION**
BREAST IMAGING IN BREAST SCREENING

Table coordinator: Alexandre Marchiori Xavier de Jesus (BRA)

1:45 pm – 2:05 pm Safety de-escalation on mammographic screening for who and when?
Corinne Balleyguier (FRA)

2:05 pm – 2:25 pm Supplemental imaging in breast screening: DBT x US x RMI for who and when?
Ritse Mann (NED)

2:25 pm – 2:45 pm AI for breast cancer screening, where we are and the ongoing trials
Carlos Shimizu (BRA)

2:45 pm – 3:05 pm Discussion

3:05 pm – 3:30 pm Coffee Break

MODULE 3 IMAGING APPROACHES

Table coordinator: Jurandyr Vasconcellos Neto (BRA)

3:30 pm – 3:50 pm The best mammography / tomosynthesis can reach. My best cases, BI-RADS and pathological report
Selma di Pace Bauab (BRA)

3:50 pm – 4:10 pm Optimum ultrasound usage. Best cases, BI-RADS and pathological report
Eduardo Carvalho Pessoa (BRA)

4:10 pm – 4:30 pm Optimum MRI usage. Best cases, BI-RADS and pathological report
Heverton Leal Ernesto de Amorim (BRA)

4:30 pm – 4:50 pm	Optimum CESM usage. Best cases, BI-RADS and pathological report Rodrigo Pepe (BRA)
4:50 pm – 5:05 pm	Discussion

MODULE 4 **INVASIVE APPROACHES AND INTERVENTIONISM**

Table coordinator: Ana Beatriz Marinho de Jesus Teixeira (BRA)

5:10 pm – 5:30 pm	Core biopsy, situations with risk of underestimation and implications for clinical practice Eun Sook Ko (KOR)
5:30 pm – 5:50 pm	Minimal invasive biopsy and machine learning algorithm based diagnosis after neoadjuvant treatment: ready for prime time? Joerg Heil (GER) / André Pfob (GER)
5:50 pm – 6:10 pm	Guiding non-palpable lesions for excision: wire x nuclear seeds x coal. How to perform? Linei Augusta Brolini Dellê Urban (BRA)
6:10 pm – 6:30 pm	Imaging - pathological correlation – case marathon Gustavo Machado Badan (BRA)
6:30 pm – 6:45 pm	Discussion
6:45 pm – 7:15 pm	Coffee Break

MODULE 5 **CONFERENCE**

Table coordinator: Cristina Pinto Naldi Ruiz (BRA)

7:15 pm – 7:45 pm	Breast mammographic screening, from reducing the risk of breast cancer death to treatment de-escalation Fiona Gilbert (GBR)
7:45 pm – 7:55 pm	Discussion

MODULE 6 **PERCUTANEOUS TREATMENT OF BREAST CANCER**

Table coordinator: Mariana Mesquita Gomes Caitano (BRA)

8 pm – 8:20 pm	Vacuum Assisted Resection (VAR): a potential approach for percutaneous resection and margins evaluation Henrique Lima Couto (BRA)
8:20 pm – 8:40 pm	Managing complications and adverse effects of Vacuum Assisted excision (VAE) Henrique Lima Couto (BRA)
8:40 pm – 9 pm	Cryoablation for Breast Cancer, experience from the pandemic Dennis Holmes (USA)
9 pm – 9:20 pm	Discussion

ROOM 3 - THERANOSTIC NANOMEDICINE WORKSHOP
1 pm – 9:30 pm

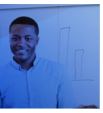
Coordinator: Andris Bakuzis (BRA)

MODULE 1

1 pm – 1:40 pm	Nanothermometers for in vivo tumor diagnosis and therapy Daniel Jaque (ESP)
1:40 pm – 2 pm	Scintillating Nanoparticles for X-ray activated Photodynamic Therapy Next-Generation In Vivo Dosimetry Éder José Guidelli (BRA)
2 pm – 2:15 pm	Core–shell nanoparticles for low-field magnetic hyperthermia and enhanced photothermal therapy with potential for nanothermometry Marcus Vinicius de Araújo (BRA)
2:15 pm – 2:30 pm	Stimuli-responsive magneto-polymeric layer-by-layer engineered nanoplatforms for remotely triggered curcumin release Marcelo Henrique Sousa (BRA)
2:30 pm – 3:10 pm	Nanowarming for Regenerative Medicine John Bischof (USA)
3:10 pm – 3:30 pm	Discussions
3:30 pm – 3:40 pm	Coffee Break

MODULE 2

3:40 pm – 4:20 pm	Applying therapeutic devices and nanoparticles in veterinary oncology Ashish Rajan (USA)
4:20 pm – 4:40 pm	Curcumin promotes endoplasmic reticulum stress and immunogenic cell death in murine CT26 colorectal cancer cells Luis Alexandre Muehlmann (BRA)
4:40 pm – 4:55 pm	Magnetic nanoparticle photothermal-induced abscopal effect in bilateral murine tumor model Andris Bakuzis (BRA)
4:55 pm – 5:15 pm	Breast Cancer prevention with Immunogenic Cell Death Vaccines: a preclinical development João Paulo Figueiró Longo (BRA)
5:15 pm – 5:35 pm	Corona protein impacts on magnetic nanoparticles pharma-cokinetics and AC biosusceptometry signal André Gonçalves Próspero (BRA)
5:35 pm – 5:55 pm	Radiopharmaceuticals and Nano-radiopharmaceutics as potente theranostics Ralph Santos Oliveira (BRA)
5:55 pm – 6:15 pm	Modelling tumor logistic growth challenged by nanosized drug deliver system Paulo César de Morais (BRA)
6:15 pm – 6:30 pm	Discussions
6:30 pm – 6:35 pm	Coffee Break



MODULE 3

6:35 pm – 6:55 pm	Nanothermometers for imaging and thermal sensing in the shortwave infrared light with focus on the III-BW Carlos Jacinto da Silva (BRA)
6:55 pm – 7:15 pm	Approaches to combine optics, magnetism, and acoustics in theranostic systems Theo Zeferino Pavan (BRA)
7:15 pm – 7:55 pm	Magnetic resonance thermometry Kagayaki Kuroda (JPN)
7:55 pm – 8:10 pm	Image-guided biodistribution and pharmacokinetics by AC Biosusceptometry Guilherme Augusto Soares (BRA)
8:10 pm – 8:40 pm	Target-specific nanoparticles: Will they become a reality? Mateus Borba Cardoso (BRA)
8:40 pm – 9:10 pm	Nanomedicines, the immune system and the road to COVID19 Vaccine Eliana Martins Lima (BRA)
9:10 pm – 9:30 pm	Discussions

ROOM 4 - ONCOPLASTY WORKSHOP -
6th STUDENTS AND ALUMNI MEETING OF THE CONTINUED EDUCATION PROGRAM ON ONCOPLASTY AND BREAST RECONSTRUCTION HOSTED BY HOSPITAL ARAÚJO JORGE AND AMARAL CARVALHO HOSPITAL
1 pm – 9:30 pm

(with translation)

Coordinators:	Cícero de Andrade Urban (BRA) Maurício de Aquino Resende (BRA) Régis Resende Paulinelli (BRA)
Opening:	Régis Resende Paulinelli (BRA)
SESSION 1	**THE FUTURE OF BREAST SURGERY AND ONCOPLASTIC SURGERY**
Coordinator:	Maurício de Aquino Resende (BRA)
1 pm – 1:20 pm	Change of roles and competencies for the breast surgeon of the future Bahadir Güllüoglu (TUR)
1:20 pm – 1:40 pm	How artificial intelligence can change breast surgery Giuseppe Catanuto (ITA)
1:40 pm – 2 pm	Fat grafting prior to prophylactic mastectomy for patients with a high risk of complications Krishna Clough (FRA)
2 pm – 2:20 pm	New technologies that can influence breast surgery in the future Pedro Filipe Pereira Gouveia (POR)
2:20 pm – 2:45 pm	Discussion Augusto Tufi Hassan (BRA) Francisco Abed (PAR) Jill Dietz (USA) Ricardo Pardo Garcìa (GBR)

SESSION 2	**CONTROVERSIES IN BREAST SURGERY AND ONCOPLASTIC SURGERY**

Coordinator:	Cícero de Andrade Urban (BRA)
2:50 pm – 3:10 pm	Is Breast Conservation an option in Multifocal Multicentric Breast Cancer? 10' Yes - Yazan Masannat (GBR) 10' No - Ashutosh Kothari (GBR)
3:10 pm – 3:50 pm	Do we need to use Meshes in DTI after conservative mastectomies? 20' Yes – Maurizio Nava (ITA) 20' No – Benigno Acea Nebril (ESP)
3:50 pm – 4:10 pm	Discussion Cicero de Andrade Urban (BRA) Eduardo Gonzales (ARG) Fabricio Palermo Brenelli (BRA) Paulus Fabrício Mascarenhas Ramos (BRA)
4:10 pm – 4:30 pm	Coffee Break

SESSION 3 **VIDEOS OF INNOVATIVE TECHNIQUES**

Coordinator:	João Ricardo Auler Paloschi (BRA)
4:30 pm	Invisible oncoplastic surgery Andrii Zhygulin (UKR)
4:40 pm	Sick lobe based surgery Zoltán Matrai (HUN)
4:50 pm	Septal reduction mammoplasty Moustapha Hamdi (BEL)
5 pm	Mastectomy Goldilocks Mahmoud A.Alhussini (EGY)

5:10 pm	Disguised geometric compensation Régis Resende Paulinelli (BRA)
5:20 pm	Latissimus dorsai mini-flap and immediate fat grafting Jean-Marc Piat (FRA)
5:30 pm – 6 pm	Discussion Gastón Berman (ARG) Raghavan Vydia (GBR) Silvio Eduardo Bromberg (BRA) Vilmar Marques de Oliveira (BRA)
6 pm – 6:30 pm	Coffee Break

SESSION 4 **BEST ONCOPLASTIC SURGERY VIDEO**

Coordinator: Luiz Fernando Jubé Ribeiro (BRA)

6:30 pm – 6:40 pm	Video 1 - Complex solution - Conversion from a geometric compensation to a thoracolateral V-Y advancement flap Osvaldo de Alcântara Braga Aidar (BRA)
6:40 pm – 6:50 pm	Video 2 - Directed axillary dissection (TAD) by metallic wire, from pre-surgical marking to operative technique Henrique Lima Couto (BRA)
6:50 pm – 7 pm	Video 3 - Grisotti Retail + Intrabeam Marcus Vinícius da Luz (BRA)
7 pm – 7:30 pm	Discussion and trial Darley Ferreira (BRA) Francisco Pimentel Cavalcante (BRA) Jaime Letzkus (CHI) Rodrigo Cericatto (BRA)

SESSION 5 **BEST CASE OF ONCOPLASTIC SURGERY AND BREAST RECONSTRUCTION**
7:30 pm – 8:55 pm

Coordinator: Regis Resende Paulinelli (BRA)

Speaker: Maurício de Aquino Resende (BRA)

Discussion: Aline Carvalho Rocha (BRA)
Fabiana Christina Araújo Pereira Lisboa (BRA)
Jorge Villanova Biazus (BRA)
Roberto Kepler da Cunha Amaral (BRA)

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9 pm – 9:30 pm Conference: Evidence-based oncoplastic surgery. What do we actually know

Coordinator: Ailton Joioso (BRA)

Speaker: Abhishek Chatterjee (USA)

Closing remarks: Cícero de Andrade Urban (BRA)
Maurício de Aquino Resende (BRA)
Régis Resende Paulinelli (BRA)

ROOM 5 - CLINICAL RESEARCH WORKSHOP
1 pm – 9:30 pm

Coordinators: André Mattar (BRA)
Gustavo Colagiovanni Girotto (BRA)
Roberto Hegg (BRA)

MODULE 1 **HOMEWORK FOR CLINICAL RESEARCH**

Table coordinator: Susanne Crocamo (BRA)

1 pm – 1:05 pm Opening

	Ruffo de Freitas Junior (BRA)
1:05 pm – 1:35 pm	Current clinical research setting in Brazil where are we now? André Mattar (BRA)
1:35 pm – 2:05 pm	What does the Industry seek in a research center Gabriela Andre Prior (BRA)
2:05 pm – 2:35 pm	What do I expect from a clinical trial sponsor? Taiane Francieli Rebelatto (BRA)
2:35 pm – 2:55 pm	Q & A
2:55 pm – 3:30 pm	Coffee Break

MODULE 2 **RESEARCH CENTER MANAGEMENT SESSION**

Table coordinator: Larissa Andressa Orsolini (BRA)

3:30 pm – 3:50 pm	What is the minimal structure for an oncology research center? Roberto Hegg (BRA)
3:50 pm – 4:10 pm	How to increase the number of trials without undermining data quality? João Daniel Guedes (BRA)
4:10 pm – 4:30 pm	Is there a way to speed up the regulatory process? Isabela Basso dos Santos Trindade (BRA)
4:30 pm – 4:50 pm	Clinical research budget and agreement analysis: How to turn it into a sustainable Center? Kamylla da Silva Caldeira (BRA)

4:50 pm – 5:10 pm	Q & A
5:10 pm – 5:30 pm	EXPERT PANEL: Practical tips on preventive and corrective actions in situations that were not provided for in the agreement? Everyone
5:30 pm – 6 pm	Coffee Break

MODULE 3 **FEASIBILITY, RECRUTING AND RETENTION AND SESSION**

Table coordinator: Daniele Assad Suzuki (BRA)

6 pm – 6:20 pm	The feasibility process: is there a best way to do it? José Luiz Pedrini (BRA)
6:20 pm – 6:40 pm	Recruitment strategy for breast cancer trials Marcelo Salgado (BRA)
6:40 pm – 7 pm	Retention during the treatment: how to deal with the placebo and some chemotherapy control arm? Romualdo Barroso de Sousa (BRA)
7 pm – 7:20 pm	Retention strategy during the follow up period Magda Conceição Barbosa Gomes (BRA)
7:20 pm – 7:40 pm	Clinical outcome based on overall survival and quality of life Suelen Silvana dos Santos (BRA)
7:40 pm – 8 pm	Q & A

MODULE 4 **SESSION ON CLINICAL RESEARCH DIFFICULT SITUATIONS**

Table coordinator: Rubens Jose Pereira (BRA)

8:10 pm – 8:30 pm Changes in the trial design with an ongoing study: how not to compromise the delivery of the promised sample (n)
Graziela Zibetti Dal Molin (BRA)

8:30 pm – 8:50 pm Controversies over RBM: how not to impact centers with high recruitment rates?
André Sanches (BRA)

8:50 pm – 9:10 pm How to be prepared for an audit/inspection?
Gustavo Colagiovanni Girotto (BRA)

9:10 pm – 9:30 pm Q & A

ROOM 6 - PALLIATIVE CARE WORKSHOP
1 pm – 5:30 pm

Coordinators: Ricardo Caponero (BRA)
Ana Lúcia Coradazzi (BRA)

1 pm – 2 pm Palliative care: perspectives and challenges for this decade
Daniel Neves Forte (BRA)

2 pm – 2:30 pm Pathological communication
Ana Lúcia Coradazzi (BRA)

2:30 pm – 3 pm What every breast specialist needs to know about palliative care
Sarah Ananda Gomes (BRA)

3 pm – 3:30 pm Coffee Break

3:30 pm – 3:55 pm	Cognitive changes in endocrine therapy Fabiana Marthes Molli Caron (BRA)
3:55 pm – 4:20 pm	The role of physical therapy in the prevention of sequelae and quality of life within breast cancer survivors Márcia Hidalgo de Queiróz (BRA)
4:20 pm – 4:45 pm	Nutrition during and after breast cancer treatment Gisele Vieira (BRA)
4:45 pm – 5 pm	Debates, closing remarks Ricardo Caponero (BRA)
5 pm – 5:30 pm	Coffee Break

ROOM 6 - PRECEPTORSHIP LIBBS
5:30 pm – 9:30 pm

(with translation)

Coordinator: Ricardo Caponero (BRA)

PART 1 CHANGES IN THE SYSTEMIC TREATMENT

5:30 pm – 5:40 pm	Immunotherapy in breast cancer. Why, which, when and for whom? Daniel Fontes Santos de Teive Argolo (BRA)
5:40 pm – 5:50 pm	Disease coupled with androgen receptor expression. Meaning? Where are we in terms of therapy? Marcelo Cruz (BRA)
5:50 pm – 6 pm	What has changed following the treatment for HER2+ metastatic disease? Glauber Moreira Leitão (BRA)

6 pm – 6:15 pm Discussion

PART 2 **OLIGOMETASTATIC DISEASE**

6:20 pm – 6:30 pm What is it? What is the role of radiotherapy?
Rodrigo Hanriot (BRA)

6:30 pm – 6:40 pm What are the changes in the surgical approach?
Carlos Alberto Ruiz (BRA)

6:40 pm – 6:50 pm Is the status curable?
João Nunes de Matos Neto (BRA)

6:50 pm – 7:05 pm Discussion

PART 3 **DISCREPANCIES BETWEEN MOLECULAR PROFILE (INTRINSIC SUBTYPE) AND IMMUNOHISTOCHEMISTRY. HOW TO DEAL WITH THAT IN PRACTICE?**

7:10 pm – 7:20 pm How to explain the discrepancy of the PAM-50 and IHQ?
Cristiane Nimir (BRA)

7:20 pm – 7:30 pm How to clinically address the discrepancy between molecular and immunohistochemical findings?
Filomena Marino Carvalho (BRA)

7:30 pm – 7:40 pm What is the practical importance of HER2 low?
Leandro Gonçalves Oliveira (BRA)

7:40 pm – 7:55 pm Discussion

PART 4 **CIRCULATING TUMOR CELLS / CTDNA**

8 pm – 8:10 pm	Ready to be used? Aline Coelho Gonçalves (BRA)
8:10 pm – 8:20 pm	As a predictive biomarker Diogo Brito Sales (BRA)
8:20 pm – 8:30 pm	As a prognostic biomarker Romualdo Barroso de Sousa (BRA)
8:30 pm – 8:45 pm	Discussion

PART 5 **GENETICS IN CLINICAL PRACTICE**

8:50 pm – 9 pm	Which tests to request, when, which genes and how to interpret the results? Allyne Queiroz Carneiro Cagnacci (BRA)
9 pm – 9:10 pm	Management in patient treatment and how to structure the follow-up of relatives with NON-BRCA1/2 germline mutations? Fabiana Baroni Alves Makdissi (BRA)
9:10 pm – 9:20 pm	What is the role of BRCA1/2 mutations in NON triple-negative patients? Mohammad Jahanzeb (BRA)
9:20 pm – 9:35 pm	Discussion

ROOM 7 - SIMPÓSIO ABMasto
13h - 17h

Presidente de Honra: José Antônio Ribeiro Filho (BRA)
Presidente do Simpósio: João Bosco Machado da Silveira (BRA)

PARTE A **HUMANISMO**

Coordenador: Marcos Nolasco (BRA)

13h – 13h20 História da mastologia brasileira
Carlos Inácio de Paula (BRA)

13h20 – 13h40 Formação integral do mastologista
Alfredo Barros (BRA)

13h40 – 14h A paciente com câncer de mama pós-tratamento
Jacqueline Andrade Amaral (BRA)

14h – 14h20 Debatedores
Fabiana Baroni Alves Makdissi (BRA)
Maira Caleffi (BRA)

PARTE B **PRÁTICA DA MASTOLOGIA**

Coordenador: Fernando Melo (BRA)

14h30 – 15h Mastectomia profilática bilateral: quando indicar?
Vilmar Marques de Oliveira (BRA)

15h – 15h30 Pacientes em adjuvancia com hormonioterapia (TMX, IA, etc): Podem fazer THcom segurança?
Vinicius Milani Budel (BRA)

15h30 – 15h55 Debatedores
Cesar Cabello dos Santos (BRA)
Gil Facina (BRA)

PARTE C **GENERALIDADES**

Coordenador: Ivo Carelli Filho (BRA)

16h – 16h20 ABMasto: Objetivos

Carlos Ricardo Chagas (BRA)

16h20 – 16h40 Overdiagnóstico / Overtratamento
Luiz Henrique Gebrim (BRA)

16h40 – 17h Debatedores
Luiz Ayrton Santos Junior (BRA)
Sergio B. Hatchbach (BRA)

ROOM 7 - DA VIDA ACADÊMICA AO MERCADO DE TRABALHO
17h30 - 21h30

MÓDULO 1 **REDES SOCIAIS**

17h30 - 18h Formei, e agora? O uso das redes sociais na vivência médica
Douglas Soltau Gomes (BRA)

18h - 18h30 Resolução CFM nº 1.974/11 é possível uma atualização?
Isabela Moitinho de Aragão Bulcão (BRA)
Camila Beatris Zeferino (BRA)

18h30 - 18h50 Discussion
Camila Parlow (BRA)
Fernando Ferro (BRA)

18h50 - 19h Coffee Break

MÓDULO 2 **ESPECIALIZAÇÃO: BRASIL X EXTERIOR**

19h - 19h30 Pontos positivos e negativos de uma graduação nacional - a minha experiência
Larissa Cabral (BRA)

19h30 - 20h Pontos positivos e negativos de uma graduação no exterior - a

	minha experiência Alice Francisco (BRA)
20h - 20h20	Discussion Bárbara Pace Silva de Assis Carvalho (BRA) Beatriz Iannini Fraccaroli (BRA)
20h20 - 20h30	Coffee Break

MÓDULO 3	**RESIDÊNCIA MÉDICA: MÚLTIPLAS POSSIBILIDADES DA MASTOLOGIA**
20h30 - 21h	Mastologia: uma especialidade, diversas possibilidades Andre Mattar (BRA) Rosemar Macedo Sousa Rahal (BRA)
21h10 - 21h30	Discussion Beatriz Iannini Fraccaroli (BRA) Bruno Henrique de Aguiar Brito (BRA) Camila Parlow (BRA)

ROOM 8 - Novartis
7 pm - 9 pm

7 pm – 9 pm	Highest median comprising Overall Survival reported in HR+/ HER2- Breast Cancer Ruffo de Freitas Junior (BRA)

MAY 13TH, 2022 - FRIDAY

ROOM 1 - SATELLITE SYMPOSIUM: MSD
INNOVATIONS IN IMMUNOTHERAPY IN THE TREATMENT OF TRIPLE NEGATIVE BREAST CANCER
4:30 pm - 5 pm
(only for prescribers)

Speaker: Carlos Henrique dos Anjos (BRA)

ROOM 1 – COMMENTED POSTER SESSION
7:15 pm – 9:30 pm

7:15 pm – 7:45 pm **Commented poster session 1**

Coordinator: João Nunes de Matos Neto (BRA)
Discussants: Magno Belém Cirqueira (BRA)
Vera Aparecida Saddi (BRA)

7:15 pm – 7:18 pm Multigene panel testing for breast cancer predisposition in brazilian patients
Daniele Paixão (BRA)

7:18 pm – 7:21 pm Application of a remote, fully oriented personalized program of physical exercise for women in follow-up after breast cancer treatment: effects on body composition and physical fitness
Édipo Giovani França Lara (BRA)

7:21 pm – 7:24 pm Early-onset breast cancer patients fulfilling hereditary breast and ovary cancer and Li-Fraumeni like syndromes can harbor TP53 pathogenic variants
Paula Francinete Faustino da Silva (BRA)

7:24 pm – 7:27 pm Comparasion of functional performance and kinesiophobia between breast cancer survivors and apparently health women
Vitor Alves Marques (BRA)

7:27 pm – 7:30 pm MIR-26a and MIR-181c profile highlight as potential prognosis biomarkers in triple-negative breast cancer patients
Bárbara Danielle Silva Siqueira (BRA)

7:30 pm – 7:45 pm Discussion

7:50 pm – 8:20 pm **Commented poster session 2**

Coordinator: Carlos Alberto Ruiz (BRA)
Discussants: Ana Luiza Lima Sousa (BRA)
Rosangela da Silveira Corrêa (BRA)

7:50 pm – 7:53 pm Determinants of survival on Brazilian patients with breast cancer in public and private practice
Ridania de Oliveira Frederice (BRA)

7:53 pm – 7:56 pm Effect of acupuncture and exercise therapy on muscular strength, lymphedema and quality of life in breast cancer survivors
Patricia Santolia Giron (BRA)

7:56 pm – 7:59 pm The impact of the covid-19 pandemic on the performance of mammographies in the brazilian northeast: an ecological study
Danyelle Santos Novaes (BRA)

7:59 pm – 8:02 pm Evaluation of an E-Health Program: results in the emotional well-being of brazilian patients with breast cancer
Isabella Barros Rabelo Gontijo Tumeh (BRA)

8:02 pm – 8:05 pm Somatic mutational landscape characterization of metastatic breast cancer in Brazil
Yuri Cardoso Rodrigues Beckedorff Bittencourt (BRA)

8:05 pm – 8:20 pm Discussion

8:25 pm – 8:55 pm **Commented poster session 3**

Coordinator: Marianne Pinotti (BRA)
Discussants: Jordana Carolina Marques Godinho Mota (BRA)
Nayara Alves de Freitas Lemos (BRA)

8:25 pm – 8:28 pm Hereditary Breast Cancer in the public health system of Federal District (DF) – Brazil
Tatiana Strava Correa (BRA)

8:28 pm – 8:31 pm Fat loss solutions for overweight breast cancer patients with sleep disturbances
Diana Artene (ROU)

8:31 pm – 8:34 pm Opportunistic mammographic screening indicators in a decade in the state of Goiás: technical, social and economic characteristics
Rosangela da Silveira Corrêa (BRA)

8:34 pm – 8:37 pm Diagnosis of breast cancer in Brazil: reflection on the impact of the COVID-19
Maria Fernanda Passos Rocha Ramos (BRA)

8:37 pm – 8:40 pm Standardization of the ficoll gradient technique for the isolation of monuclear cells from peripheral blood
Erick de Matos Santos (BRA)

8:40 pm – 8:55 pm Discussion

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9 pm – 9:30 pm **Commented poster session 4**

Coordinator: Silvia Helena Rabelo dos Santos (BRA)
Discussants: Jorge Villanova Biazus (BRA)
Juarez Antônio de Sousa (BRA)

9 pm – 9:03 pm Evaluation of CYP2D6 polymorphism in patients with breast cancer and tamoxifen users of two breast services of Belo Horizonte
Geovanna Cota Caetano (BRA)

9:03 pm – 9:06 pm	Tamoxifen Adjuvant Interferers Study (TAIS study): an explorative analysis of (Z)-Endoxifen and early recurrence of breast cancer in a prospective Brazilian study José Claudio Casali da Rocha (BRA)
9:06 pm – 9:09 pm	Does the Body Mass Index (BMI) impact the overall survival (OS) of Brazilian women with breast cancer (BC) who have achieved pathological complete response (pCR) after neoadjuvant chemotherapy (NCT)? Fernanda Grace Bauk Richter (BRA)
9:09 pm – 9:12 pm	Neoadjuvant chemotherapy of breast cancer without further surgical intervention Hagigat Valiyeva (AZE)
9:12 pm – 9:15 pm	Adherence to adjuvant endocrine therapy and its determining factors in patients with breast cancer Anna Luiza Zapalowski Galvão (BRA)
9:15 pm – 9:30 pm	Discussion

MAY 13TH, 2022 - FRIDAY

ROOM 2 - REUNIÃO DE CONSENSO LATINO-AMERICANO DE RADIOTERAPIA INTRAOPERATÓRIA DE CÂNCER DE MAMA
2 pm – 6:15 pm

(Watch on www.bbcs.org.br)

Coordinators:	Nilceana Maya Aires Freitas (BRA) Ruffo de Freitas Junior (BRA) Frank Lane Braga Rodrigues (BRA) Gustavo Sarria (PER) Luis Victor Pendola Gomez (ECU) Marcus Castilho (BRA) Rodrigo Hanriot (BRA) Samir Hanna (BRA) Vilmar Marques de Oliveira (BRA)
2 pm – 2:05 pm	Abertura Arthur Accioly (BRA) Marcus Castilho (BRA) Nilceana Maya Aires Freitas (BRA) Ruffo de Freitas Junior (BRA)
2:05 pm – 2:15 pm	Acesso das pacientes com câncer de mama ao tratamento de radioterapia Marcus Castilho (BRA)
MODULO I	**CRITÉRIOS DE INDICAÇÃO PARA A RT INTRAOPERATÓRIA DE MAMA (RTIOP)**
2:15 pm – 2:25 pm	Resumo dos estudos TARGIT e ELIOT Fabiana Baroni Alves Makdissi (BRA)
2:25 pm – 2:35 pm	Nível I de evidência: metanálise e revisão sistemática em RTIOP de mama Samir Hanna (BRA)

2:35 pm – 2:45 pm	Critérios ASTRO, ESTRO, ASBrS e AGO para a radioterapia acelerada parcial da mama Nilceana Maya Aires Freitas (BRA)
2:45 pm – 2:55 pm	RTIOP como Boost, há vantagens com a técnica? Gustavo Sarria (PER)

MODULO II	**ZONAS DE CONTROVÉRSIAS E CONTRA-INDICAÇÕES PARA RTIOP EXCLUSIVA**
2:55 pm – 3:05 pm	RTIOP no CDIS e no ca lobular invasor? Marcel Fang (BRA)
3:05 pm – 3:15 pm	RTIOP apenas para pacientes menopausadas? Há limite mínimo de idade? Evandro Mateus (BRA)
3:15 pm – 3:25 pm	RTIOP exclusiva (sem RT total da mama) independente se HER2 positivo, IAV positiva, CDIS extenso e grau histológico III? Rodrigo Hanriot (BRA)
3:25 pm – 3:35 pm	O que fazer após a RTIOP com resultado do BLS com micrometastase e macrometastase? Marcel Fang (BRA)

MODULO III	**SITUAÇÕES ESPECIAIS: RTIOP ASSOCIADA À ONCOPLASTIA**
3:35 pm – 3:45 pm	RTIOP em pacientes com implantes mamário Regis Resende Paulinelli (BRA)
3:45 pm – 3:55 pm	RTIOP em pacientes com oncoplastia sem implante Alexandre Marchiori Xavier de Jesus (BRA)

MODULO IV **TECNOLOGIA APLICADA**

3:55 pm – 4:05 pm Aspectos técnicos da RTIOP com o Intrabeam
Renato Cagnacci Neto (BRA)

4:05 pm – 4:15pm Aspectos técnicos da RTIOP com elétrons
Leonardo Chamon (BRA)

4:15 pm – 4:25 pm Aspectos técnicos da Braquiterapia de Mama
Célia Regina Soares (BRA)

MODULO V **RESULTADOS E EXPERIÊNCIA DA RTIOP**

4:25 pm – 4:35 pm Com Elétrons
Antonio Luiz Frasson (BRA)

4:35 pm – 4:45 pm Com Intrabeam
Renato Cagnacci Neto (BRA)

MODULO VI **SEGURANÇA E MANEJO DAS COMPLICAÇÕES**

4:45 pm – 4:55 pm Efeitos colaterais e manejo das complicações da RTIOP com o Intrabeam
Renato Cagnacci Neto (BRA)

4:55 pm – 5:05 pm Efeitos colaterais e manejo das complicações da RTIOP com Elétrons
Felipe Pereira Zerwes (BRA)

MODULO VII **VOTAÇÃO**

5:05 pm – 5:20 pm Discussão e consenso de indicações da RTIOP na mama

5:20 pm – 5:35 pm	Discussão e consenso quanto aos pontos controversos e Contra-indicações
5:35 pm – 5:45 pm	Discussão e consenso quanto as situações especiais
5:45 pm – 6 pm	Discussão e consenso dos aspectos técnicos

MODULO VIII	**RESUMO**
6 pm – 6:15 pm	Encerramento

Lista de painelistas:

Alexandre Marchiori Xavier de Jesus (BRA)
Antonio Luiz Frasson (BRA)
Arthur Accioly (BRA)
Carolina Humeres Abrahão (BRA)
Célia Regina Soares (BRA)
Evandro Mateus (BRA)
Fabiana Baroni Alves Makdissi (BRA)
Felipe Pereira Zerwes (BRA)
Frank Lane Braga Rodrigues (BRA)
Gustavo Sarria (PER)
Harley Oliveira (BRA)
Leonardo Chamon (BRA)
Luis Victor Pendola Gomez (ECU)
Marcel Fang (BRA)
Marcus Castilho (BRA)

MAY 13TH, 2022 - FRIDAY

MAIN AUDITORIUM

1:15 pm – 1:25 pm Official opening
Ruffo de Freitas Júnior (BRA)
Luis Victor Pendola Gomez (ECU)

1:25 pm – 1:50 pm **Mini conference:** What are the Brazilian germline variants in breast cancer patients?

Chairwoman: Annamaria Massahud Rodrigues dos Santos (BRA)
Speaker: Rodrigo Santa Cruz Guindaline (BRA)

1:55 pm – 2:20 pm **Mini conference:** Augmentation mammography: revisiting the ACR protocol recomendation

Chairman: Marcus Nacimento Borges (BRA)
Speaker: Lilian Soares Couto (BRA)

2:25 pm – 3:10 pm **General session 1**

Coordinator: Simone Elias (BRA)
Discussants: Mara Costa Dutra (BRA)
Nancy Cristina Ferraz de Lucena Ferreira (BRA)

2:25 pm – 2:35 pm Photobiomodulation in breast cancer radiodermatitis: photodermis, a double blind randomized controlled trial (NCT04059809)
Francine Fischer Sgrott (BRA)

2:35 pm – 2:45 pm Immunomodulatory effects of honey from stingless bees and honey bees on breast cancer cells
Marla Alcolea (BRA)

2:45 pm – 2:55 pm Scintillating nanoparticles for X-ray activated photodynamic therapy and next-generation in vivo dosimetry
Éder José Guidelli (BRA)

2:55 pm – 3:10 pm Discussion

3:10 pm – 3:40 pm Coffee Break

3:45 pm – 4:25 pm **Satellite Symposium: Lilly -** The use of iCDK4/6 in the adjuvant setting of HR+ HER2- breast cancer: a paradigm shift

Chairman and Speaker: André Mattar (BRA)
Speaker: Débora Gagliato (BRA)

4:30 pm – 4:50 pm **Mini conference:** Theranostic nanomedicine breaking the edge in cancer care

Chairwoman: Mônica Travassos Jourdan (BRA)
Speaker: Andris Bakuzis (BRA)

5:05 pm – 5:50 pm **General session 2**

Coordinator: Giuliano Mendes Duarte (BRA)
Discussants: Clêcio Enio Murta de Lucena (BRA)
Rosemar Macedo Sousa Rahal (BRA)

5:05 pm – 5:15 pm Genomic and clinical data analysis of APE1 protein, breast cancer stem cell phenotype and hypoxic tumor microenvironment
Ísis Salviano Soares de Amorim (BRA)

5:15 pm – 5:25 pm De-escalation of chemotherapy in elderly women using a 70-gene platform – comparison of the MINDACT study with a real-world study in the Brazilian population (AGEMA-BRA)
Fabio Postiglione Mansani (BRA)

5:25 pm – 5:35 pm Multigene germline NGS testing in triple-negative breast cancer (TNBC)
Rafael Canfield Brianese (BRA)

5:35 pm – 5:50 pm Discussion

5:55 pm – 6:20 pm **Mini conference:** What is the impact of changes encompassing the ECOG-ACRIN (E2108) in metastatic breast cancer?

Chairman: Mauro Pinto Passos (BRA)
Speaker: Seema Khan (USA)

6:25 pm – 6:40 pm BBCS 2022 Nomination Award

Recipient of BBCS 2022 award: Carlos Barrios (BRA)
Coordinators: Ruffo de Freitas Junior (BRA)
Rosemar Macedo Sousa Rahal (BRA)

6:40 pm – 7 pm **Mini conference:** New technology from science to clinical practice

Chairman: Victor Domingos Lisita Rosa (BRA)
Speaker: Carlos Barrios (BRA)

7 pm – 7:20 pm Coffee Break

7:20 pm – 7:40 pm **Mini conference:**

Chairwoman:
Speaker:

7:45 pm – 8:30 pm **General session 3**

Coordinator: Marise Amaral Rebouças Moreira (BRA)
Discussants: José Cláudio Casali da Rocha (BRA)
René Aloisio da Costa Vieira (BRA)

7:45 pm – 7:55 pm Triple-negative breast cancer patients have more abundant mirnas profiles derived from the peripheral blood circulating microvesicles as a tool of liquid biopsy
Letícia da Conceição Braga (BRA)

7:55 pm – 8:05 pm Circulating neutrophil-derived microvesicles as a potential diagnostic marker in breast cancer patients
Thayse Batista Moreira (BRA)

8:05 pm – 8:15 pm Prevalence of PD-L1 among patients with metastatic triple negative metastatic breast cancer (mTNBC) and its association with tumor infiltrating lymphocytes (TIL)
Ana Carolina de Aquino Diniz (BRA)

8:15 pm – 8:30 pm Discussion

8:35 pm – 8:55 pm **Mini conference:** What's the approach of axillary surgery in the genomic era?

Chairman: Carlos Marino Cabral Calvano Filho (BRA)
Speaker: Antonio Luiz Frasson (BRA)

9 pm – 9:20 pm **Mini conference:** Breast MRI, response assessment after neoadjuvant chemotherapy

Chairwoman: Flávia Vidal Cabero (BRA)
Speaker: Linei Augusta Brolini Dellê Urban (BRA)

9:25 pm – 10:10 pm **General session 4**

Coordinator: Vinicius Milani Budel (BRA)
Discussants: Fábio Francisco Oliveira Rodrigues (BRA)
Leonardo Ribeiro Soares (BRA)

9:25 pm – 9:35 pm Comparative analysis of the degree of patient satisfaction after breast-conserving surgery with or without oncoplastic surgery: a systematic review and meta-analysis
Fabiana Christina Araújo Pereira Lisboa (BRA)

9:35 pm – 9:45 pm Tissue expander or permanent implant in immediate breast reconstruction after mastectomy? – A sistematic review
María Laura Ramos Pérez (PER)

9:45 pm – 9:55 pm Multi-centre prospective evaluation of Negative Pressure Wound Therapy (NPWT) in patients undergoing oncoplastic breast surgery
Muskaan Khosla (GBR)

9:55 pm – 10:10 pm Discussion

MAY 14TH, 2022 – SATURDAY

ROOM 1 - SATELLITE SYMPOSIUM: ROCHE
9:45 am – 10:15 am

(only for prescribers)

Theme 1:	Evolution of HER2+ Breast Cancer Treatment
Speaker:	Cristiano Augusto Andrade de Resende (BRA)

Theme 2:	Transforming the experience of women with cancer HER2+
Speaker:	Juliana Thome Ribeiro (BRA)

MAY 14TH, 2022 – SATURDAY

MAIN AUDITORIUM

8 am – 8:45 am **General session 5**

Coordinator: Glauber Moreira Leitão (BRA)
Discussants: Gláucia Mesquita Cordeiro (BRA)
João Bosco Ramos Borges (BRA)

8 am – 8:10 am Validation of a novel in vitro breast cancer chemoresistance platform in neoadjuvant setting
Martina Lichtenfels (BRA)

8:10 am – 8:20 am Deep learning neural network image analysis of immunohistochemical protein expression reveals a significantly reduced expression of Biglycan in breast cancer
Ana Paula Thiesen (BRA)

8:20 am – 8:30 am Investigation of circulating-tumor DNA (ctDNA) in patients with non-metastatic Triple-Negative Breast Cancer (TNBC) submitted to neoadjuvant chemotherapy
Rafael Canfield Brianese (BRA)

8:30 am – 8:45 am Discussion

8:50 am – 9:10 am **Mini conference:** Agnostic therapies: how do they apply to breast cancer?

Chairman: Dannillo Guimarães Pereira (BRA)
Speaker: Romualdo Barroso de Sousa (BRA)

9:15 am – 9:40 am **Mini conference:** ER+ word salad decoded: SERD, SERM, SERCA, CERAN, PROTAC

Chairman: Diogo Brito Sales (BRA)
Speaker: Komal Jhaveri (USA)

9:45 am – 10 am	Maria Antonieta Regal Dutra Nomination Award Recipient of the award: Maira Caleffi (BRA)
Coordinators:	Ruffo de Freitas Junior (BRA) Rosemar Macedo Sousa Rahal (BRA)
10 am – 10:15 am	Mini conference: The importance of mastology integration in Latin America
Chairwoman:	Rosemar Macedo Sousa Rahal (BRA)
Speaker:	Pablo Vladimir Rafael Sitic Vargas (BOL)
10:15 am – 10:35 am	Coffee Break
10:35 am – 11 am	**Satellite Symposium: Libbs -** HER2+ early breast cancer: current knowledges on personalized medicine and paving the way for the future
Chairman:	Ruffo de Freitas Junior (BRA)
Speaker:	Matteo Lambertini (ITA)
11:05 am – 11:30 am	**Mini conference:** How reliable are gene platforms to de-escalate systemic treatment in axilla+ patients?
Chairwoman:	Daniele Assad Suzuki (BRA)
Speaker:	Kevin Kalinsky (USA)
11:35 am – 12 pm	**Mini conference:** HER2 low breast cancer: how to diagnose and what are its clinical implications?
Chairman:	Frank Lane Braga Rodrigues (BRA)
Speaker:	Paolo Tarantino (USA)
12 pm – 12:30 pm	**Lecture:** The best of breast cancer in the last 12 months (ASCO 2021, SABS 2021 and BBCS 2022)
Chairwoman:	Luciana Limongi (BRA)
Speaker 1:	Loco regional - Felipe Pereira Zerwes (BRA)
Speaker 2:	Systemic - Cristiano Augusto Andrade de Resende (BRA)

12:35 pm – 1 pm	Awarding and closing remarks Leonardo Ribeiro Soares (BRA) Régis Resende Paulinelli (BRA) Rosemar Macedo Sousa Rahal (BRA)

APPROVED PAPERS FOR ORAL PRESENTATION

PHOTOBIOMODULATION IN BREAST CANCER RADIODERMATITIS: PHOTODERMIS, A DOUBLE BLIND RANDOMIZED CONTROLLED TRIAL (NCT04059809)

Francine Fischer Sgrott[1], Jaqueline Munaretto Tim Baiocchi[2], Glauco Baiocchi Neto[3], Pamela Cabral Finato Rech[4], Anderson da Cruz[4], Omar Sulivan Ruzza Filho[4], Lucas Sapienza[5]

[1]Universidade do Vale do Itajai (UNIVALI), Itajaí (SC) - Brazil
[2]Instituto Oncofisio, São Paulo (SP) - Brazil
[3]AC Camargo Cancer Center, São Paulo (SP) - Brazil
[4]CORB Radioterapia, Itajaí (SC) - Brazil
[5]Baylor College of Medicine, Houston – United States

Objective: To evaluate the impact of PBM in reducing the prevalence of radiodermatitis in breast cancer. **Methodology:** A randomized double-blind controlled trial was carried out and included women who underwent conservative surgery or mastectomy and treated with 3D Radiotherapy. Patients were randomly assigned (1:1) to receive usual skin care ± red PBM (660 nm) with energy of 3 Joules per point every 2cm across the breast for 10 minutes. The degree of radiodermatitis were blindly evaluated by 2 professionals every 5 days from D5 to D30 of adjuvant radiotherapy. The control group had the PBM device positioned but was not turned on. The device was positioned on the top of the operated breast (plastron). Axillary, infra-mammary and supra-clavicular regions were excluded from the PBM device template. **Results:** 48 women were included in the study (26 women in PBM group and 22 in control group). The median age was 51.5 years (range, 29-78) and median total radiation dose of 50.4Gy (range, 42-55). The clinical and pathological variables did not differ between groups. Total of 16 (33.3%) cases had radiodermatitis in the breast plastron and 42 (87.5%) outside the breast plastron area. Radiodermatitis in the breast plastron was significantly lower in PBM group compared to control group [11.5% vs. 59.1%; HR 0.090 (95%CI: 0.021-0.39); p=0.001]. However, there was no difference in radiodermatitis rates outside the breast area (not involved with PBM) for the PBM group compared to the control group [88.5% vs. 86.4%; HR 1.21 (95%CI: 0.21-6.7); p=0.82]. Additionally, 2 (7.7%) cases in the PBM group and 12 (54.5%) in the control group had radiodermatitis in both breast and non-breast regions [HR 0.069 (95%CI: 0.013-0.36); p=0.002].
Conclusion: Our results suggests that PBM in women with breast cancer treated by adjuvant radiation significantly reduces the risk of radiodermatitis.

Keywords: Breast neoplasms. Low level laser therapy. Photobiomodulation. Radiation. Radiation oncology. Radiotherapy-induced skin reactions.

IMMUNOMODULATORY EFFECTS OF HONEY FROM STINGLESS BEES AND HONEY BEES ON BREAST CANCER CELLS

Marla Alcolea[1], Renata Moraes Brito[1], Mahmi Fujimori[1], Adenilda Cristina Honorio-França[1], Eduardo Luzia França[1], Paula Becker Pertuzatti[1]

[1]Universidade Federal de Mato Grosso, Programa de Pós-graduação em Imunologia e Parasitologia Básicas e Aplicadas, Instituto de Ciências Biológicas e da Saúde. Barra do Garças, Mato Grosso, Brazil

Objective: The limitations of current cancer treatments and their side effects lead to a growing interest in the study of natural compounds and alternative therapies such as apitherapy. Honey has in its constitution several substances that contribute to neutralize free radicals, such as phenolic compounds of which stand out flavonoids and phenolic acids, besides having important antimicrobial and antitumor activity. However, the mechanisms of antitumor action of honey are still poorly understood, and how the characteristics of honeys of different species influence this mechanism are also poorly understood. The aim of this study was to verify the antitumor action of honey bees (Apis mellifera) and stingless bees (Tetragonisca angustula) honey in mammary adenocarcinoma cell lines (MCF-7). **Methodology:** Cell viability analyzes were performed using fluorescence and flow cytometry methods, and oxidative balance through the release of superoxide anion (•O2ˉ) and production of the enzyme superoxide dismutase (SOD) in human peripheral blood mononuclear cells (MN), MCF-7 and coculture of both. **Results:** Viability analyzes in MN cells showed that honey samples, at concentrations of 100 mg/mL, 100 ng/mL and 100 pg/mL, do not present cytotoxicity to cells. But in MCF-7 cells, there was a decrease in viability with stingless bee honey (100 mg/mL) showing the highest cytotoxic action, reducing the viability of cancer cells by 30.4%. The same honey sample caused an immunomodulatory effect on both MN and cancer cells, stimulating greater release of •O2ˉ and SOD enzyme activity in these cells. While in the coculture there was a greater release of •O2ˉ but a decrease in enzymatic activity. **Conclusion:** The results showed that specially stingless bees honey, acts on the oxidative stress of cells and this might be the mechanism related to its antitumor action. Thus, honey can play a potential role as a preventive agent and complementary therapy against breast cancer.

Keywords: Breast cancer. Antioxidant activity. Phenolic compounds. Immunomodulation.

APPROVED PAPERS FOR ORAL PRESENTATION

SCINTILLATING NANOPARTICLES FOR X-RAY ACTIVATED PHOTODYNAMIC THERAPY AND NEXT-GENERATION IN VIVO DOSIMETRY

Éder José Guidelli[1], Mileni Mayumi Isikawa[1]

[1]*Universidade de São Paulo, São Paulo (SP) - Brazil*

Objective: Development of scintillating nanoparticles to simultaneously monitor the x-ray dose delivered to tumors during treatments with x-ray activated photodynamic therapy (X-PDT). **Methodology:** A microfluidic synthesis was developed to grow GdF3:Eu theranostic scintillating nanoparticles (ScNPs). The flow reaction was optimized to enhance scintillation emission from the Eu+3 ions. **Results:** The as-prepared ~15 nm rhombohedral shaped nanoparticles self-assembled into ~100 nm mesoporous flower-like nanostructures, but the rhombohedral units remained intact and the scintillation spectra unaltered. The conjugation of the ScNPs with multilayers of methylene blue (MB) in a core-shell structure (GdF@MB) resulted in enhanced singlet oxygen (1O2) generation under x-ray irradiation, with maximum 1O2 production for nanoparticles with 4 MB layers (GdF@4MB). High 1O2 yield was further evidenced in cytotoxicity assays, demonstrating complete cell death only for the association of ScNPs with MB and x-rays. Because the scintillating Eu+3 emission at 694 nm is within the therapeutic window and was only partially absorbed by the MB molecules, it was explored for getting in vivo dosimetric information. Using porcine skin and fat to simulate the optical and radiological properties of the human tissues, we showed that the scintillation light can be detected for a tissue layer of ~16 mm, thick enough to be employed in radiotherapy treatments of breast cancers, for instance. **Conclusion:** The GdF3:Eu ScNPs and the GdF@4MB nanoconjugates are strong candidates for treating cancer with X-PDT while monitoring the treatment and the radiation dose delivered, opening new avenues to develop a next-generation modality of real-time in vivo dosimetry.

Keywords: Nanodevices; Radioluminescence; Lanthanides; Microfluidic; radiotherapy; Dosimetry.

GENOMIC AND CLINICAL DATA ANALYSIS OF APE1 PROTEIN, BREAST CANCER STEM CELL PHENOTYPE AND HYPOXIC TUMOR MICROENVIRONMENT

Ísis Salviano Soares de Amorim[1], Priscyanne Barreto Siqueira[1], Mariana Moreno de Sousa Rodrigues[1], Andre Luiz Mencalha[1]

[1]*Universidade do Estado do Rio de Janeiro, Rio de Janeiro (RJ) - Brazil*

Objective: Introduction: Breast cancer (BC) is a heterogeneous disease at cellular and molecular levels. BC tumors present a cellular subpopulation of breast cancer stem cells (BCSCs) linked with tumor initiation and progression, recurrence and therapeutic failure. The BCSC is preferentially found in hypoxic areas of tumor, which are common features of BC and are significantly associated with worse prognosis. Although hypoxia activates aggressive BCSC phenotype, the proteins that performed this molecular crossroad are still unknown. Therefore, finding proteins that performed this crossing would help define new promisors' clinical strategies. Apurine/Apyrimidine Endonuclease 1 (APE1) protein has emerged as a new therapeutic target in cancer treatment and is overexpressed in more aggressive BC tumors. However, the relationship of APE1 with BCSC considering the hypoxia microenvironment, does not exist. **Objectives:** Thus, we aimed to analyze the genomic/transcriptomic and clinical data of the APE1, BCSC phenotype and hypoxic tumors. **Methodology:** Methodology: Genomic/transcription data and clinical attributes were collected and clustered on the Xena UCSC platform from The Cancer Genome Atlas (TCGA) BRCA database. Clinical molecular signatures from BCSC and hypoxia-related genes were used to separate BC patients in high or low expression groups for these genes, and were evaluated their clinical data, including survival, and APE1 expression. Results: Results: Patients with high expression of BCSC-related genes exhibited worse prognosis and overexpression of APE1. Additionally, high expression of hypoxia-related genes was also associated with worse prognosis and exhibited high levels of APE1. Patients with high expression of BCSC genes also exhibited high levels of hypoxia-related genes. APE1, BCSC and hypoxia-related genes were more expressed in BC compared to adjacent normal samples. **Conclusion:** Data suggests that APE1 is overexpressed in hypoxia and BCSC phenotype, which are associated with worse prognosis for BC.

Keywords: Key words: APE1, Breast cancer stem cell, Hypoxia, Breast cancer, Prognosis

APPROVED PAPERS FOR ORAL PRESENTATION

DE-ESCALATION OF CHEMOTHERAPY IN ELDERLY WOMEN USING A 70-GENE PLATFORM – COMPARISON OF THE MINDACT STUDY WITH A REAL-WORLD STUDY IN THE BRAZILIAN POPULATION (AGEMA-BRA)

Fabio Postiglione Mansani[1], Vitóira Celinski[1], Ruffo de Freitas Junior[2]

[1]*Universidade Estadual de Ponta Grossa, Ponta Grossa (PR) - Brazil*
[2]*Universidade Federal de Goiás, Goiânia (GO) - Brazil*

Breast cancer is the most common malignant neoplasm in women, except for non-melanoma skin tumors, and the population pyramid demonstrating an aging trend in most countries, it is necessary to value the analysis of the therapies used in this population, but elderly, seeking the de-escalation of treatment, mainly reducing the use of chemotherapy drugs. In this context, the application of genetic signatures contributes to determine a less toxic treatment in these women with luminal biological profile tumors, where toxicity is less tolerated and with a higher risk of fatal outcomes by therapy. The MINDACT study evaluated this population using MammaPrint™, but patients over 70 years of age were poorly represented, corresponding only to 0.8% of the patients evaluated (56 of 6693 patients), and only 26 patients with high clinical risk. **Objective:** The aim of this study was to verify the possibility of de-escalation of systemic treatment with the use of MammaPrint™ genetic signature in elderly women, comparing the prevalence of data from the MINDACT study population with a cohort of Brazilian patients submitted to the examination (AGEMA-BRA). **Methodology:** Cross-sectional study comparing the prevalence of low- and high-risk genomic patients in a population with luminal profile breast carcinoma with high clinical risk in MINDACT study populations with a Brazilian cohort older than 70 years, evaluated by the genetic signature MammaPrint™, between 2016 and 2020. Descriptive analysis of data with estimation of simple and relative frequencies of variables in relation to low- and high-risk classification and study populations (AGEMA-BRA and MINDACT). Then, the chi-square test was used to verify the differences between the proportions. To measure the intensity of differences/associations, relative risks (RR) and their 95% confidence intervals (95% CI) were calculated. The tests were considered significant when p <0. 05. Results: From a database of 950 patients submitted to MammaPrint™ analysis from 2016 to 2020, seven were excluded by incomplete data. The population over than 70 years old (71-84 years old) at the time of diagnosis was represented by 89 patients (9.4%), all with high clinical risk. Of these patients, 54 (60.7%) corresponded to low genomic risk and 35 (39.3%) at high genomic risk. The comparative analysis between the prevalence of the Brazilian population and the MINDACT study, in which the low genomic risk was 61.5% and the high genomic risk 38.5%, showed no statistical significance (RR 0.98 (0.69-1.39) p= 0.936). **Conclusion:** The comparative analysis of the prevalence among the results of MammaPrint™ in the MINDACT study and in a cohort of Brazilian women (AGEMA-BRA) in the population older than 70 years, showed no statistical difference. With the confirmation of MINDACT data in this age group in a three-fold larger cohort (AGEMA-BRA), it is inferable that, although the low representativeness in the studies, the genetic signature MammaPrint™ can be applied in the elderly woman. Evaluation of outcomes regarding relapse-free survival and overall survival, an ongoing study, is necessary to confirm the data obtained.

Keywords: Breast cancer treatment, genetic testing, elderly woman.

MULTIGENE GERMLINE NGS TESTING IN TRIPLE-NEGATIVE BREAST CANCER (TNBC)

Rafael Canfield Brianese[1], Karina Miranda Santiago[1], Giovana Tardin Torrezan[1], Marina de Brot[2], Jose Claudio Casali da Rocha[3], Fabiana Baroni Alves Makdissi[4], Dirce Maria Carraro[1]

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[2]Pathology Department - A.C. Camargo Cancer Center, São Paulo (SP) - Brazil

[3]Oncogenetics Department - A. C. Camargo Cancer Center, São Paulo (SP) - Brazil

[4]Breast Surgery Department - A. C. Camargo Cancer Center, São Paulo (SP) - Brazil

Objective: TNBC is a breast cancer subtype strongly associated with BRCA1 germline mutations which is involved in homologous recombination DNA repair deficiency (HRD). Tumors with HRD may benefit from DNA-damage-inducing agents and PARP inhibitors. We aim to characterize germline mutations in HRD-related genes in TNBC and associate with clinical data. **Methodology:** TNBC patients (n=117) attending A. C. Camargo Cancer Center had genetic testing performed by NGS (26 to 127 cancer predisposition gene panels) in leukocyte/saliva DNA. Germline variants were screened in tumor DNA, when possible, for investigation of loss-of-heterozygosity (LOH). **Results:** All patients were screened for germline variants: 26% (30/117) were Hereditary HRR-related, being 21% BRCA1, 2% BRCA2, 2% PALB2 and 1% RAD51. For women diagnosed at young age (<40 years) this rate increases to 38% (20/52), being 31% BRCA1, 4% BRCA2, 2% PALB2 and 1% RAD51. Also, 37% of cases presented variants of uncertain significance (VUS). LOH analysis showed that 100% (6/6) of pathogenic variants had LOH while only 30% of VUS had LOH. Interestingly, for 2 cases with concurrent pathogenic and VUS only the pathogenic variant exhibit LOH. Additionally, 47% (7/15) of the VUS with LOH were in HRR-related genes. **Conclusion:** The majority of germline variants in TNBC are in BRCA1 gene but other HRR-related genes also contributed to HRD. LOH analysis may help classify VUS regarding pathogenicity.

Keywords: triple-negative breast cancer; germline mutation; loss of heterozygosity

TRIPLE-NEGATIVE BREAST CANCER PATIENTS HAVE MORE ABUNDANT MIRNAS PROFILES DERIVED FROM THE PERIPHERAL BLOOD CIRCULATING MICROVESICLES AS A TOOL OF LIQUID BIOPSY

Letícia da Conceição Braga[1], Thayse Batista Moreira[2], Ana Luiza de Freitas Magalhães Gomes[1], Matheus Gomes de Souza[3], Paulo Guilherme de Oliveira Salles[1], Fábio Ribeiro Queiroz[1]

[1]Instituto Mário Penna – Belo Horizonte, Minas Gerais – Brazil

[2]Instituto René Rachou – Fundação Osvaldo Cruz - Fiocruz Minas, – Belo Horizonte, Minas Gerais – Brazil

[3]Universidade Federal de Uberlândia - Campus Patos de Minas, Minas Gerais - Brazil

Objective: The identification and characterization of miRNAs derived from microvesicles of breast cancer patients is the main goal of this study. **Methodology:** For this, a cohort of 28 patients was evaluated, 28,6% are HER2 overexpressed, 46,4% are triple-negative, and 25% are triple-positive. The study protocol was approved by the Ethics Committee of Instituto Mário Penna (CAEE 82703418.8.0000.5121). For this purpose, the peripheral blood was collected in EDTA tubes and processed for obtaining the red blood cell-free plasm. The microvesicles were purified from plasm using the microRNeasy kit (Qiagen) with posterior small RNA precipitation, according to manufacture instructions. The small RNA obtained was used for high throughput sequencing using QIAseq miRNA Library kit (Qiagen) for library construction, according to manufacture instructions. The sequencing was performed by Illumina NextSeq 550. The sequences obtained were filtered by quality, the adapters were removed, and small RNAs patterns were evaluated using Unitas (version 1.7.8). **Results:** The three groups of patients showed a significant abundance of miRNAs profiles. The triple-negative breast cancer (TNBC) patients showed the highest relative abundance which can be due to the more intense exocrine activity of this type of tumor. Besides that, our results highlighted a great abundance of miR-223-3p on the TNBC patients group. **Conclusion:** Normally, TNBC patients have an aggressive condition of disease, and cell proliferation, migration, and invasion are common events. These characteristics can be regulated by miRNAs exported from tumor cells in microvesicles. Several miRNAs already are related to these events, and it makes them potential therapeutic or diagnostic targets for this disease. miR-223-3p was previously related to epithelial-mesenchymal transition, cell proliferation, and migration. This phenotypic effect is a strong indication that this miRNA could be used as a biomarker in TNBC management, and open great possibilities for further validation of this as a tool of liquid biopsy test.

Keywords: miRNAs, breast cancer, microvesicles

CIRCULATING NEUTROPHIL-DERIVED MICROVESICLES AS A POTENTIAL DIAGNOSTIC MARKER IN BREAST CANCER PATIENTS

Thayse Batista Moreira[1], Marina Malheiros Araújo Silvestrini[1], Ana Luiza de Freitas Magalhães Gomes[2], Erick Matos Santos[3], Paulo Guilherme de Oliveira Salles[2], Letícia Conceição Braga[2], Andréa Teixeira de Carvalho[1]

[1]Instituto René Rachou, Belo Horizonte (MG) – Brazil
[2]Instituto Mário Penna, Belo Horizonte (MG) – Brazil
Centro Universitário Metodista Izabela Hendrix, Belo Horizonte (MG) - Brazil

Objective: Because of the already observed importance of neutrophil-derived microvesicles (NMVs) in cancer development and progression, this study aims to quantify NMVs according to clinical staging and histological grade in the blood of breast cancer patients for a possible use in the liquid biopsy technique and personalized medicine, assisting in treatment decision. **Methodology:** Peripheral blood was collected from 19 healthy women (Control group) and from 51 patients with locally advanced BC (Case Group), in Instituto Mário Penna, Belo Horizonte, Brazil. The study protocol was approved by the Ethics Committee of Instituto Mário Penna (CAEE 82703418.8.0000.5121). Clinical staging and histological grade data were obtained from the medical records of the study patients. The characterization of circulating NMVs was performed by immunophenotyping with specific neutrophil markers (CD66 and CD16) and quantification was performed by flow cytometry. The circulating NMVs characterization was performed by immunophenotyping with neutrophil-specific markers (CD66 and CD16). **Results:** Our data showed a higher number of NMVs in BC patients, regardless of clinical staging and degree of tumor differentiation, when compared to the control group. Besides no differences was observed in relation to the histopathological grade, the NMVs appear to have potential diagnostic in patients with BC. **Conclusion:** In clinical scenario, they are going to use as a candidate strategy the liquid biopsy to support clinical decision-making and guide therapeutic choices.

Keywords: Microvesicles, breast cancer, neutrophils, PRONON.

APPROVED PAPERS FOR ORAL PRESENTATION

PREVALENCE OF PD-L1 AMONG PATIENTS WITH METASTATIC TRIPLE NEGATIVE METASTATIC BREAST CANCER (mTNBC) AND ITS ASSOCIATION WITH TUMOR INFILTRATING LYMPHOCYTES (TIL)

Ana Carolina de Aquino Diniz[1], Romualdo Barroso de Sousa[2], Artur Katz[2], Ricardo Garcia Pastorello[2], Maria Paula Furtado Santos[1], Mariana Petaccia de Macedo[2], Rudinei Diogo Marques Linck[2]

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Objective: Immune checkpoint inhibitors (ICIs) combined with chemotherapy have emerged as the first line for patients with mTNBC whose tumors are PD-L1 positive. However, given the paucity of data in Brazilian populations, the objective of this study is to evaluate prevalence of PD-L1 positive mTNBC in a single Brazilian center and its association with TIL. **Methodology:** We assembled a retrospective cohort of all patients with metastatic breast cancer who have been tested for PD-L1 biomarker from January 2018 to December 2020. Patient's clinical information, including use of ICI, and PD-L1 status was obtained from electronical medical record's analysis and TIL slide's material was reviewed by a single pathologist. TIL were assessed according to the international consensus and were classified as low, intermediate and high TIL, respective if they present with <10, 10-60 and > 60%. Survival data (overall survival and progression free survival) for TNBC patients who have been treated with immunotherapy are presented. **Results:** Among the 46 female patients tested for PD-L1 in our institution, 25 (54,4%) presented with mTNBC. Among this group (median age 46 years), the majority was diagnosed between 2016 and 2020 (56%), in stages I or II (56%) and had invasive ductal carcinomas (96%). Most patients (23; 92%) underwent the SP-142 Ventana test, and the prevalence of positive (PD-L1 ≥ 1%) patients was 40% . Samples from primary tumor were more likely to be PD-L1 positive (9/17; 53%) compared with samples from metastatic sites (1/8; 12,5%) tumors. A total of 19 had TIL assessment. Most cases presented with low TIL (n=14; 73,7%), followed by intermediate TIL (n=5; 26,3%) and no cases of high TIL. Patients with PD-L1 negative tumors were more likely to present tumors with low TIL (9/11; 81,8%) versus those with PD-L1 positive tumors (5/8; 62,5%). A total of 13 patients received ICI plus chemotherapy. For this subset of patients, the median age was 47, 69,3% (n=9) had PD-L1 positive tumors, and most of them (n=12) received atezolizumab plus nab-paclitaxel. Only 1 patient received ICI as first line.
The median PFS was 2,36 months (2,4 months for PD-L1+ and 2,01 months PD-L1-). Two patients received the combination of ICI plus chemotherapy > 6 months. Disease progression was the main reason (64%) for ICI interruption. Only one patient stopped therapy for toxicity (neuropathy). **Conclusion:** To our knowledge, this is the first "real -world" Brazilian study evaluating the prevalence of PD-L1 positive mTNBC and its association with TIL. The prevalence of PD-L1 in mTNBC is consistent with scientific literature and physicians should prioritize performing the test in samples from primary tumors

Keywords: Immunotherapy, triple negative breast cancer, PD-L1, immune check point inhibitors, TIL

COMPARATIVE ANALYSIS OF THE DEGREE OF PATIENT SATISFACTION AFTER BREAST-CONSERVING SURGERY WITH OR WITHOUT ONCOPLASTIC SURGERY: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Objective: A systematic review was carried out on the comparative analysis of the degree of satisfaction of patients undergoing breast-conserving surgery for the treatment of breast cancer, with and without oncoplastic surgery, in addition to performing a meta-analysis to integrate the results of studies carried out with different questionnaires for arrive at a summary measure that could homogenize and categorize this complex comparative analysis arising from such diverse quantitative collection methods. **Methodology:** Systematic review with literature searches in MEDLINE (by PubMed), EMBASE, Clinical Trials, Scopus, Web of Science, BVS e Oppen gray. The Joanna Briggs Institute tools were used to evaluate the methodological quality of the studies. Data were summarized through meta-analyses using a random effects model and considered relative risk (RR) measures and their confidence intervals (95% CI). **Results:** After eligibility assessment, we included 6 studies in the systematic review and in the quantitative analysis, encompassing a total of 1,110 patients. The studies included seemed to have overall good methodological quality. There was no statistically significant difference for the aesthetic outcome between women who underwent oncoplastic and conservative surgery (RR = 0.98; 95% CI = 0.91-1.04). Patients undergoing conservative surgery with oncoplastic surgery have more advanced staging, greater tumor size and resected specimen weight compared to classical surgery. In addition to a higher frequency of breast tumor location unfavorable to the best aesthetic result (central, medial or inferior). **Conclusion:** The degree of patient satisfaction with conservative surgery, with or without oncoplastic surgery, is similar between the groups. The time elapsed from the surgery to the measurement of the outcome and the tumor conditions seem to have an impact on this result. There is no specific and standardized questionnaire to assess patient satisfaction with conservative surgery, bringing limited and controversial results. A standardization in the quantification of this data in further studies is suggested.

Keywords: Breast Neoplasms; Mammaplasty; Mastectomy, Segmental; Patient Satisfaction

APPROVED PAPERS FOR ORAL PRESENTATION

TISSUE EXPANDER OR PERMANENT IMPLANT IN IMMEDIATE BREAST RECONSTRUCTION AFTER MASTECTOMY? – A SISTEMATIC REVIEW

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Objective: Evaluate options for tissue expander and permanent implant and know the main indications, complications, effects on adjuvant treatment, impact on quality of life and cost-effectiveness of each one. **Methodology:** A sistematic review was performed, according to the PRISMA statment. For the identification of articles on the topic, PUBMED, EMBASE and Cochrane databases were searched from 2000 to 2021 and only English terms were used. The inclusion criteria were: meta-analyses, systematic reviews, randomized or non-randomized clinical trials and observational studies. The analysis of the studies was descriptive. **Results:** The initial search in the databases identified 65 articles, after reviewing the inclusion criteria 32 studies were available. According to relevance, 20 were excluded due to unavailability of the full text or irrelevance for study purpose. Twelve articles were included, with an average of 1068 patients per study. The studies were heterogeneous, with results mostly favorable for reconstruction at a stage with IP. **Conclusion:** Single-stage breast reconstruction is a promising strategy with acceptable complication rates and described advantages. Post-mastectomy Radiotherapy (PMRT) increased complications. Finally, studies are still heterogeneous, both in terms of methodologies and results, so is not possible extrapolated information without bias.

Keywords: Mastectomy; tissue expander; Reconstruction; Two stages or one stage; Radiotherapy.

MULTI-CENTRE PROSPECTIVE EVALUATION OF NEGATIVE PRESSURE WOUND THERAPY (NPWT) IN PATIENTS UNDERGOING ONCOPLASTIC BREAST SURGERY

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Objective: Oncoplastic breast surgery is well-established but has higher risk of wound complications. This may result in a delay to receive adjuvant therapy, increased hospital visits with associated financial implications and sub-optimal cosmetic outcomes. Negative pressure wound therapy (NPWT) has emerged as an additional tool to reduce wound complication rates in but further evaluation is required to evaluate its efficacy. This study investigated the prophylactic use of PICO® NPWT in patients undergoing oncoplastic breast surgery. We determined the rate of wound-related complications dehiscence, necrosis, implant loss and infection (SSI). We compared our findings with data from the National Mastectomy and Breast Reconstruction Audit 2011 (NMBRA) and implant-based Breast Reconstruction Audit (iBRA). **Methodology:** This was a prospective multi-centre national audit. The participating UK breast units routinely used NPWT for oncoplastic breast surgical procedures. Data collection included rates of wound dehiscence, wound necrosis, wound infection, and implant loss. The study findings were compared against the National Mastectomy and Breast Reconstruction Audit (NMBRA) and the iBRA (implant breast reconstruction evaluation) study. **Results:** Data from 267 patients were included in the study from 7 centres. The mean duration of PICO use was 6.6 [SD 1.9 days]. 36 patients (13.5%) developed post-operative wound complications. 16 patients (6%) developed skin flap necrosis. Wound dehiscence occurred in 13 patients (4.9%). 15 patients (5.6%) developed post-operative wound infection. Of the whole cohort, 11 patients (4.1%) required further surgery due to wound complications and 8 patients (3%) had a delay in receipt of adjuvant therapy. 158 patients underwent mastectomy with immediate implant-based breast reconstruction. Post-operative wound complication rate was comparable in this subgroup (n=22; 13.9%). Skin flap necrosis was seen in 10 patients (6.3%). Wound dehiscence was seen in 7 patients (4.4%) and 8 patients (5.1%) developed wound infection. Implant loss rate was 3.8%. The estimated total cost saving was￡84,613 and ￡316.90 per patient. **Conclusion:** Our study suggests that prophylactic use of NPWT in oncoplastic breast surgery results in low rate of wound-related complications with associated healthcare cost benefits. A prospective randomised controlled trial is required to further evaluate the prophylactic use of NPWT in oncoplastic breast surgery.

Keywords: oncoplastic breast surgery, implants, wound complications, negative pressure therapy

APPROVED PAPERS FOR ORAL PRESENTATION

VALIDATION OF A NOVEL IN VITRO BREAST CANCER CHEMORESISTANCE PLATFORM IN NEOADJUVANT SETTING

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Objective: The aim of our study is to validate a novel in vitro chemoresistance platform for two drugs commonly used in the neoadjuvant setting for breast cancer (BC). **Methodology:** Three BC cell lines (MCF-7 (luminal); SKBR3 (HER2+); MDA-MB-231 (triple negative)) were used to confirm the efficacy of the platform. Patients with invasive BC and partial response to neoadjuvant chemotherapy were included in this initial report. Fresh tumor samples were collected during surgery and dissociated to obtaining the tumor cells. The tumor cells were cultured in the chemoresistance platform with doxorubicin and paclitaxel and after 72h cell viability was evaluated. The test result is defined based on cell viability as low (< 40%), medium (40-60%) and high (> 60%) resistance. **Results:** The three BC cell lines presented low resistance to doxorubicin, MCF-7 and SKBR3 cells also presented low resistance to paclitaxel whereas MDA-MB-231 has intermediate resistance. Samples from 10 BC patients with partial response to neoadjuvant chemotherapy were tested in the novel chemoresistance platform. All the patients received doxorubicin and paclitaxel as part of the treatment. The overall rate of assay success was 100%. Regarding molecular subtypes, 40% were Luminal, 20% LuminalHER2, 10% HER2, and 30% triple negative. The 10 samples presented 100% of high resistance to paclitaxel. High resistance to doxorubicin was observed in 70% of the samples, intermediate in 10% and low in 20%. The chemoresistance platform demonstrated that samples already treated with paclitaxel and doxorubicin in neoadjuvant setting presented more high resistance to the drugs compared to the BC cell lines. **Conclusion:** This preliminary result demonstrated more high resistance in tumors previously treated with doxorubicin and paclitaxel compared to BC cell lines without previous treatment and highlighted the success of the in vitro chemoresistance platform to test tumor samples after neoadjuvant treatment.

Keywords: Breast neoplasms; neoadjuvant therapy; Neoplasm drug resistance

DEEP LEARNING NEURAL NETWORK IMAGE ANALYSIS OF IMMUNOHISTOCHEMICAL PROTEIN EXPRESSION REVEALS A SIGNIFICANTLY REDUCED EXPRESSION OF BIGLYCAN IN BREAST CANCER

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Objective: To compare the protein expression of biglycan (BGN) in normal breast tissue and in breast cancer using deep learning and Digital HSCORE techniques. **Methodology:** In this case-control study, 24 formalin–fixed, paraffin-embedded tissues were obtained from pathological archives for analysis. Normal breast (n=9) and Breast cancer (n=15) tissue sections were analyzed by immunohistochemistry using BGN monoclonal antibody (M01 - Abnova), clone 4E1-1G7 at dilution 1: 300 at pH 6, and 3,3'-Diaminobenzidine (DAB) as the chromogen. Photomicrographs of the slides were analyzed with ImageJ software with "color deconvolution". After selecting the regions of interest (ROI), deconvoluted panels with DAB only were quantified using arbitrary DAB units. Another set, with higher magnification without ROI selection, was submitted to the inceptionV3 deep neural network image embedding recognition model. Next, supervised neural network analysis, using stratified 20 fold cross validation, with 200 hidden layers, ReLu activation, and regularization at α=0.0001 were applied for SDLNN. The sample size was calculated for a minimum of 7 cases and 7 controls, having a power = 90%, an α error = 5%, and a standard deviation of 20, to identify a decrease from the average of 40 DAB units (control) to 4 DAB units in cancer. Ethical approval was obtained from the Hospital de Clínicas de Porto Alegre Ethical Review Board (2019/0337) CAAE 15329119.9.0000.5327. **Results:** BGN expression (mean ± SD) was 6.1 ± 3.9 in breast cancer tissue, while in normal breast tissue, it was 39.6 ± 21.9, using D-HScore (p=0.0017, Student t-test, Welch corrected). SDLNN was able to correctly classify 110 out of 129 photomicrographs of the dataset using DAB panels only, with a classification accuracy of 85.3% (95%CI=78.1% to 90.3%) and the area under the curve=94.3% **Conclusion:** D-HScore and SDLNN were able to reveal that BGN protein expression is reduced in breast cancer tissue, compared to normal tissue.
The use of SDLNN seems to be an potential tool for image analysis in histological samples.

Keywords: breast cancer; biglican; immunohistochemistry, deep learning, digital HSCORE

APPROVED PAPERS FOR ORAL PRESENTATION

INVESTIGATION OF CIRCULATING-TUMOR DNA (ctDNA) IN PATIENTS WITH NON-METASTATIC TRIPLE-NEGATIVE BREAST CANCER (TNBC) SUBMITTED TO NEOADJUVANT CHEMOTHERAPY

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Objective: Loss-of-function germline mutation in BRCA1 increases breast cancer risk, especially the TNBC subtype. BRCA1 impairment may confer benefit from treatment with DNA damage-inducing drugs and PARP1 inhibitors. Patients who respond to neoadjuvant chemotherapy tend to have good outcomes. Our aim is to characterize the resistance to chemotherapy in patients with germline-characterized TNBC by investigating somatic mutations in ctDNA. **Methodology:** Germline genetic testing using cancer-predisposing gene panels (26-126 genes) for classifying TNBC as Hereditary or Sporadic. Somatic mutation identification in tumor (409 cancer-related gene panel) and screening of ctDNA in plasma samples during treatment. **Results:** We enrolled 96 TNBC patients of which 88 were tested for germline variants: 23% (20/88) of cases were Hereditary - BRCA1 (16%), BRCA2 (4%), PALB2 (1%), RAD51D (1%) and TP53 (1%). Tumor mutation burden (TMB) analysis (43 cases) showed that 11.6% had high and 89.4% low TMB, not associated with Hereditary status. We found, on average, 3 somatic variants per tumor (range 1-7) and used them as tumor marks for screening ctDNA in plasma. Somatic mutations in TP53 were identified in most tumors (71%). In ctDNA before treatment, detection of at least one tumor mutation was observed in 24 out of 30 patients (80%) and no association was observed regarding Hereditary status and TMB score. Although ctDNA was not associated to the residual cancer burden (RCB) score, ctDNA-positive patients were associated with clinical progression, either at baseline and during monitoring (post-neoadjuvant chemo) and ctDNA identification anticipated progression detected by imaging. **Conclusion:** Hereditary tumors, markedly due to germline variants in BRCA1, are frequent in TNBC. Tumor-mark identification using gene panel and ctDNA screening in plasma samples provide valuable information regarding clinical progression of patients treated with pre-operative chemotherapy.

Keywords: hereditary tumor; triple-negative breast cancer; ctDNA; liquid biopsy

BBCS BRAZILIAN BREAST CANCER SYMPOSIUM 2022

APPROVED COMMENTED POSTER

MULTIGENE PANEL TESTING FOR BREAST CANCER PREDISPOSITION IN BRAZILIAN PATIENTS

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Objective: Only 5-10% of breast cancer (BC) is related to inherited genetic variants and BRCA1 and BRCA2 mutations are responsible for the majority of cases. BRCA1 is more associated to the triple negative and BRCA2 to the luminal subtype. The contribution of other genes of high and moderate risk for breast cancer, such as TP53, STK11, CDH1, PTEN, ATM, CHEK2 and PALB2 are not well defined and risk estimates to specific breast cancer subtype is lacking, especially for admixed population like Brazilian.

The aim of this study is to evaluate the contribution of the multigene panel in detecting germline mutations in Brazilian breast cancer patients and its relationship with molecular subtypes and predominant ancestry. **Methodology:** A 94-gene panel was performed on 321 patients with BC fulfilling NCCN criteria, who were referred for BRCA1/2 testing between August 2016 and May 2018. Molecular subtypes were retrieved from medical records and Ancestry-specific variants were obtained from the sequencing data. **Results:** Panel analysis of 321 patients resulted in a total of 83 pathogenic/likely pathogenic (P/LP) variants identified in 81 patients, leading to a positivity rate of 25%. Of the total P/LP variants, 47% were identified in high-risk BC genes (BRCA1/2, PALB2 and TP53) and 17% in moderate-penetrance genes (ATM and CHEK2). The remainder of the variants were identified in low-risk genes and were considered unexpected findings. Variants of uncertain significance were identified in 77.6% of the patients. Regarding the molecular subtype, triple negative BC had a mutation frequency of 32% (25/79), with predominance in BRCA1 (40%). Among the luminal subtype, 19% (29/155) had P/LP variants, with BRCA1/2 genes contributing with 38% of mutated cases. For Luminal B HER2-positive subtype, 40% (16/40) had P/LP variants, with a predominance of ATM gene (37%). Finally, HER2-enriched subtype presented a mutation rate of 31% (4/13; 1 BRCA2 and 3 non-BRCA1/2). We did not detect any association of ancestry with P/LP variants or molecular subtypes. **Conclusion:** The multigene panel contributed to identify P/LP variants in other actionable genes beside BRCA1/2, increasing 7.2% of the positivity of the genetic test. Additionally, our results highlight distinct contributions of BC genes in each molecular subtype. These results indicate that women with clinical criteria for

hereditary BC may benefit from a multigene panel testing, as it allows to identify P/LP variants in other breast cancer susceptibility genes, including actionable genes, that directly impact the clinical management of these patients and family members.

Keywords: multigene panel, hereditary breast cancer

APPLICATION OF A REMOTE, FULLY ORIENTED PERSONALIZED PROGRAM OF PHYSICAL EXERCISE FOR WOMEN IN FOLLOW-UP AFTER BREAST CANCER TREATMENT: EFFECTS ON BODY COMPOSITION AND PHYSICAL FITNESS

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Objective: Getting back to regular physical activity soon after completing the treatment for breast cancer may be a challenge for most women. To assess the impact of physical exercise on physical fitness and body composition in women who have completed breast cancer treatment, we designed a personalized program of physical exercises, considering their individual basal physical activity levels. **Methodology:** The prospective study included 107 women of 18 to 60 years old shortly after curative treatment for localized breast cancer. All participants were evaluated for cardiovascular morbidities, body composition, and exercise performance. After careful physical evaluation by a personal physical trainer, each woman individually was oriented on how to perform each exercise correctly and follow the program of non-supervised exercises on their own at home, either indoor or outdoor. Women were motivated to adhere to personalized aerobic exercises, localized muscular strength/resistance, and flexibility exercises, considering individual capabilities and limitations. Evaluations including body composition, VO2max, and localized muscle resistance were performed pre-intervention (basal) and after six and nine months of intervention. **Results:** Among all, 25.23% and 44.85% were fat or overweight, respectively, at the study entrance, and 21.49% reported physical exercise regularly; 78 women adhered to the training program (72.8%), and 29 chose not to adhere (27.2%). After nine months of regular and individualized intervention, adherent women showed significantly better results in all variables of body composition and physical fitness: body mass (-4.38 ± 3.67 kg; $p<0.0001$), BMI (-1.62 ± 1.53 kg / m2; $p<0.0001$), fat percentage (-3.41 ± 3.17%; $p<0.0001$); while non-adherent women, the parameters did not change significantly: total mass (+2.83 ± 3.21 kg; $p=0.8277$), BMI (+ 1.16 ± 1.24 kg / m2; $p=0.8897$), fat percentage (+1.77 ± 2.73%; $p=0.05$). Particularly, those women with binge eating disorder, who had the worst parameters at baseline (pre-intervention), obtained more noticeable results in reducing their body mass, BMI, and fat percentage ($p<0.05$). This favorable impact of exercise extended to all ages groups and do not correlate with former physical activity ($p>0.05$), as well as it was not influenced by breast cancer characteristics (histology, stage, molecular subtypes) or treatment (mastectomy, axillary surgery, chemotherapy or radiotherapy) ($p>0.05$). **Conclusion:** Our study reinforces that women in follow-up after breast cancer, regardless of body fatness or fitness, can adopt lifestyle measures to prevent a recurrence, and medical societies should include recommendations to promote physical activity early during surveillance.

Keywords: physical activity, breast cancer, body composition, lifestyle

APPROVED COMMENTED POSTER

EARLY-ONSET BREAST CANCER PATIENTS FULFILLING HEREDITARY BREAST AND OVARY CANCER AND LI-FRAUMENI LIKE SYNDROMES CAN HARBOR TP53 PATHOGENIC VARIANTS

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Objective: We investigate the prevalence of TP53 germline pathogenic variants in a cohort of 83 breast cancer patients and 217 family members from the Midwest Brazilian region. **Methodology:** All patients met the clinical criteria for hereditary breast and ovarian cancer syndrome (HBOC) and were negative for BRCA1 and BRCA2 mutations. Moreover, 40 index patients fulfilled HBOC and the Li-Fraumeni like syndromes (LFL) criteria. The samples were tested using next generation sequencing for TP53. **Results:** Three patients harbored TP53 missense pathogenic variants (p.Arg248Gln, p.Arg337His, and p.Arg337Cys), confirmed by Sanger sequencing. One patient showed a large TP53 deletion (exons 2 -11), which was also confirmed. The p.R337H variant was detected in only one patient. **Conclusion:** In conclusion, four of 83 HBOC and LFL patients presented TP53 pathogenic variants at a young age. In contrast to other Brazilian regions, TP53 p.R337H variant appeared with low prevalence.

Keywords: TP53, breast cancer, Li-Fraumeni Syndrome, cancer predisposition

APPROVED COMMENTED POSTER

COMPARASION OF FUNCTIONAL PERFORMANCE AND KINESIOPHOBIA BETWEEN BREAST CANCER SURVIVORS AND APPARENTLY HEALTH WOMEN

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Objective: To compare of functional performance and kinesiophobia between breast cancer survivors and apparently health women **Methodology:** Participate the study 62 women divided into a control group (CNT) (age: 52,16 ± 7,59) composed health women and survivors breast cancer (SCM) (age: 52,93 ± 8,95). The functional performance was evaluated by the DASH and the kinesiophobia it was evaluated by the Tampa Scale. The normality of the data was evaluated by the Shapiro-Wilk test. Data were analyzed by Student's t test. The significance level was defined a priori at p <0.05. The unpaired t-test was used to compare functional performance and the Mann-Whitney test was used to compare kinesiophobi **Results:** The SCM group showed worse levels of functional performance (p< 0,001) and higher levels Kinesiophobia than the CNT group (p=0,05). **Conclusion:** SCM women have low levels of functional performance and higher levels of kinesiophobia

Keywords: cancer, functional capacity; fear

APPROVED COMMENTED POSTER

MIR-26a AND MIR-181c PROFILE HIGHLIGHT AS POTENTIAL PROGNOSIS BIOMARKERS IN TRIPLE-NEGATIVE BREAST CANCER PATIENTS

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Objective: The present retrospective cohort study aims to investigate the relative expression profile of microRNAs (miR 26a, 125b, 181a, 181c and 340-5p) in patients with Triple-negative breast cancer (TNBC) and its relationship with clinical outcome. **Methodology:** We included 10 patients with TNBC, treated at Mário Penna Institute, Brazil, and 5 patients without TNBC evidence, considered as control. This study was approved by the research ethics committee (CAAE protocol: 39741820.4.0000.9507). The total RNA extraction was performed from
Formalin-Fixed, Paraffin-Embedded (FFPE) Tissues using All Prep FFPE (Qiagen™). The RNA concentration was evaluated by GE NanoVue Plus Spectrophotometer and complementary DNA (cDNA) for each target was synthesized, as appropriate. To analyze the transcripts, the TaqMan real-time PCR (qRT-PCR) technique was used. The small nucleolar RNA RNU6-6P was used as an endogenous control. Changes in miRNA expression were measured by method 2 (-ΔΔCq). **Results:** The expression profile of microRNAs showed great variability among the TNBC patients, which reinforces the intratumoral heterogeneity of TNBC patients. One of 10 patients showed overexpression of all miRNA evaluated while 2/10 had underexpression from all of them. An underexpressed profile of miR 181c and 26a was seen in those samples who had a tumor histopathological grade II (3/4) and the overall survival at 1 - 3 years. On the other hand, the overexpression for both miRNAs was seen in 2/10 patients, independent of tumor histopathological grade, with the overall survival at 5 - 6 years. According to the literature, miR-26a and miR-181c suppressed the expression of MTDH and MAP4K4 genes, respectively, inhibiting the tumor-promoting effects in tumors. **Conclusion:** In conclusion, our data appear to highlight the clinical evidence to use miRNAs as new prognosis biomarkers, allowing better stratification of patients. Studies are in progress to evaluate more patients and identify a molecular signature able to predict TNBC prognosis.

Keywords: breast cancer; biomarkers; microRNA; TNBC; qRT-PC

APPROVED COMMENTED POSTER

DETERMINANTS OF SURVIVAL ON BRAZILIAN PATIENTS WITH BREAST CANCER IN PUBLIC AND PRIVATE PRACTICE

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Objective: The Brazilian health system can be divided in public and private sectors. In the public sector, insurance is provided by the state to all Brazilian citizens (municipal, state and federal levels). The private sector is comprised of the private health insurance area, with various schemes of health plans or with out-of-pocket expenses. This study proposed to evaluate the breast cancer population characteristics and treatments according to public and private health care systems. **Methodology:** This retrospective cohort had included patients diagnosed with invasive breast cancer, with health insurance information, between January 2000 and June 2020, from Fundação Oncocentro de Sao Paulo database. Patients were described according to age, gender, level of education, histology of neoplasm, stage at diagnosis and type of treatment. Categorical variables are described as percentages and frequencies. The association between demographic and treatment factors and overall survival was evaluated using a Cox Proportional Hazard (PH) regression model while accounting for different lengths of participant follow-up. Uni- and multivariable Cox proportional-hazards model were used to estimate hazard ratios with corresponding 95% confidence intervals for OS. The Kaplan-Meier (KM) curves were used to visually display survival curves, and the log-rank test were used to compare the estimated KM curves. **Results:** A total of 65543 patients were included. The distribution by age, gender and histology was the same for public and private systems. Table 1 describes all characteristics of cohort. The majority of patients was diagnosed on stage I and II (77.8%) in private system. Otherwise, at public system, it was found more advanced stage disease. (67.8% in II and III stage). Patients with metastatic tumor were more common in public system (11.1% versus 5.3%). Treatment with surgery and, at least, two types of adjuvant therapy, as trimodal therapy was the same in both groups (46,6% private versus 46.2% public). Kaplan-Meyer plot shows 5- and 10-years OS differences in all stages. 10-year OS in stage I, II, III and IV in private and public system were, respectively, 81,6 versus 77.5%, 74 versus 63.3%, 55.6% versus 39.6% and 7.6 versus 6.4%.In the multivariable analyses, the significant independent predictors for OS were private system, age and stage at diagnosis, high level education, trimodal therapy. **Conclusion:** Older patients, less intensive treatment, and lower educational level were independent predictors for worse OS.Public health system presented more advanced stage at diagnosis than private care and was associated with worse survival outcomes in Brazilian breast cancer patients.

Keywords: public health system, private health care, breast cancer, treatment, prognosis

APPROVED COMMENTED POSTER

EFFECT OF ACUPUNCTURE AND EXERCISE THERAPY ON MUSCULAR STRENGTH, LYMPHEDEMA AND QUALITY OF LIFE IN BREAST CANCER SURVIVORS

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Objective: To compare three distinct rehabilitation treatments (exercise therapy, acupuncture and Stiper®) in women undergoing breast cancer surgery, assessing strength, lymphedema and quality of life. **Methodology:** Seventy-nine women with pain above 3 on the visual analogue pain scale (VAS) and with more than 90 days of surgery were included. They were divided into three groups that received weekly treatment for 10 weeks: group I (G1) treated with standard, pre-defined exercise therapy, based on stretching of the cervical muscles, shoulder girdle and shoulder ROM exercises with duration of 30 minutes, group II (G2) treated with 30 minutes of acupuncture using predefined points and group III (G3) treated with the same acupuncture points as group II, however, using the Stiper® (silicon oxide micronized quartz pellet) in place of needles. **Results:** Sixty-seven patients completed the treatment, being 26 from G1, 23 from G2 and 18 from G3. There was an improvement of upper limb muscle strength over time in all groups, except for abduction and internal rotation movements. During treatment, there was no increase in the number of patients with lymphedema and there was no statistical difference between the groups. Regarding the EORTC QLQ-C30 quality of life questionnaire, nine of the fifteen factors analyzed showed significant differences between sessions. The factors that did not have significant differences between the three groups were Social Function, Nausea and Vomiting, Dyspnea, Loss of Appetite, Constipation and Diarrhea. **Conclusion:** The rehabilitation of physical dysfunctions in women who survived breast cancer through exercise therapy, acupuncture and Stiper® in upper limb muscle strength, lymphedema and quality of life, proved to be effective, without superiority between groups, which in leads to the conclusion that acupuncture showed equivalence of results when compared with exercise therapy, thus being an effective approach for the rehabilitation of these women.

Keywords: breast cancer, exercise therapy, acupuncture, muscle strength, lymphedema, quality of life.

APPROVED COMMENTED POSTER

THE IMPACT OF THE COVID-19 PANDEMIC ON THE PERFORMANCE OF MAMMOGRAPHIES IN THE BRAZILIAN NORTHEAST: AN ECOLOGICAL STUDY

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Objective: To evaluate breast cancer screening according to demographic data, year of completion, age group, and geographic distribution in the pandemic period. **Methodology:** An ecological study was carried out, using data collected from the Departamento de Informática do Sistema Único de Saúde (DATASUS). The study population included patients who underwent screening for breast cancer in northeastern Brazil between 2019 and 2021. **Results:** The National Cancer Institute recommends biannual breast cancer screening through mammography for women aged 50 to 69 years. However, in 2020, the Covid-19 pandemic generated consequences such as the withdrawal of patients from health services, interfering with the performance of preventive mammography. In northeastern Brazil, 879,903 mammograms were performed in female patients in 2019, a number that reduced 39.23% in 2020 (534,647) and 5.68% in 2021 (829,902). It was also found a drop in the number of the exam per target audience, especially in the year 2020 (40.36%) when compared to the year 2019, with the age group 50 to 54 years having the largest reduction, with a drop of 40.05%. It was found that between 2019 and 2020 all northeastern states had a drop in the number of exams performed, with the largest drop being in Sergipe (52.54%). Despite this, in 2021 some states showed an increase in the number of exams performed when compared to 2019, with Piauí standing out (50.54%). **Conclusion:** In the Covid-19 pandemic, there was a decrease in breast cancer screening between the years 2019 and 2020 in northeastern Brazil, with a discrete rise in the number of exams performed in some states in 2021. The youngest age group of the target audience was the most negatively impacted. Thus, the need to use these data to formulate public policies to encourage screening and reduce morbidity and mortality from breast cancer is evident.

Keywords: Medical Oncology; Mass Screening; Breast Neoplasms; Mammography; Brazil.

APPROVED COMMENTED POSTER

EVALUATION OF AN E-HEALTH PROGRAM: RESULTS IN THE EMOTIONAL WELL-BEING OF BRAZILIAN PATIENTS WITH BREAST CANCER

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Objective: The use of e-Health-based technologies has been boosted with COVID-19. This study evaluated the effectiveness of a program developed specifically for women with advanced breast cancer, users of the Unified Health System (SUS), in course of outpatient chemotherapy. **Methodology:** An e-Health program, called Conforto, was developed by a Brazilian group. Patients were followed up on a virtual platform and received psychosocial support via telehealth. In this longitudinal study, female patients diagnosed with local advanced and metastatic breast cancer (IIIb, IIIc and IV) undergoing outpatient chemotherapy were recruited. Symptom burden was assessed weekly and the EQ-5D-3L monthly in conjunction with the Perceived General Health (PSG) scale over six months with a two-month follow-up. **Results:** A total of 71 patients were recruited, 71.8% (N = 51) participated for at least three months, 39.4% (n = 28) participated for six months. At baseline, patients had a higher burden of anxiety, distress, and insomnia. The results showed improvement in anxiety ($P < 0.001$), distress ($P < 0.001$), insomnia ($P = 0.03$), sadness ($P < 0.001$) and inappetence ($P = 0.01$). PSG was significantly altered while remaining at follow-up ($P = 0.006$). Most patients (70%) despite not having shown the history of symptoms to the attending physician, spoke with them about the symptoms. **Conclusion:** To date, this is the first study with e-Health technology developed for Brazilian cancer patients. Routine screening in the virtual modality and telephone service aimed at promoting self-management promoted emotional well-being even in an economically vulnerable population. Although exploratory data, the findings suggest the effectiveness and feasibility of a sustainable intervention for women with local advanced and metastatic breast cancer. The results facilitate access to supportive care and thus equity. For better results, it is necessary to include other professionals in the remote monitoring.

Keywords: eywords: Access to Technological Innovation; Telemedicine; e-Health; Comfort Care; Psycho-Oncology.

APPROVED COMMENTED POSTER

SOMATIC MUTATIONAL LANDSCAPE CHARACTERIZATION OF METASTATIC BREAST CANCER IN BRAZIL

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Objective: Breast cancer (BC) is the most common malignancy among Brazilian women after non-melanoma skin cancer. The mutational landscape of BC in Brazil is unknown. This work describes the mutational profile of a cohort of patients with metastatic breast cancer (MBC) who had undergone next-generation sequencing (NGS) using a comprehensive somatic tumor panel. **Methodology:** We retrospectively reviewed medical records from MBCs patients. The mutational profile, clinical and demographic characteristics were abstracted. Furthermore, the patterns of ordering the panel and its usefulness for a clinical decision were evaluated. **Results:** We found 54 female patients who fulfilled the above criteria. The median age was 58 years (32 - 86). Most tumors tested were hormone receptor-positive (74%), followed by triple-negative (20,3%), hormone receptor-positive / HER2-positive (3,7%) and HER-2 positive (1,85%). The median time between the diagnosis of metastatic disease and the NGS execution was 40 months (0 - 112), and only three patients (5,5%) had not received systemic treatment prior to the test recommendation. Somatic mutations were identified in 94,4% (n = 51), mainly in PIK3CA (48,1%), TP53 (42,5%) and ESR1 (18,5%) genes. Tumor burden mutation (TMB) were informed in 61,1% (n = 33) somatic panels, and 15,1% (n = 5) had tumors with TMB ≥ 10 mutations/megabase. Approved genome-driven cancer therapy was found in 54,9% (n = 28), and eight patients (28,5%) received it. **Conclusion:** This study showed a high proportion of actionable somatic genomic alterations, and it reinforces the growing usefulness of a comprehensive NGS tumor somatic panel in managing patients with MBC.

Keywords: metastatic breast cancer, somatic mutations, next-generation sequencing.

APPROVED COMMENTED POSTER

HEREDITARY BREAST CANCER IN THE PUBLIC HEALTH SYSTEM OF FEDERAL DISTRICT (DF) – BRAZIL

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Objective: The lack of financial resources challenges the inclusion of genetic testing in the Brazilian Public Health System. This study aims to describe the detection rate of germline pathogenic variants (GPV) in patients at risk of hereditary breast cancer (BC) in the public hospitals of Brasilia, DF, as well as the clinical and demographic profile of patients (pts). **Methodology:** Hereditary cancer risk assessment based on the National Comprehensive Cancer Network Criteria, version 1.2020 was performed in patients with personal history of BC who were being followed in a public hospital (DF) between January 2021 and January 2022. **Results:** Among 217 female pts eligible for this study, 78 pts performed germline multigene panel testing out of pocket. Panels included 26-84 cancer susceptibility genes. Patients in this cohort were mainly from the center-west (46%) and northeast (31%) of Brazil. The median age of BC diagnosis was 42 years old. Invasive ductal carcinoma represented 88% of the tumors. From a total of 78 BC, 52% were hormone receptor positive, 23% HER2 positive, 24% triple negative. Most patients presented with locally advanced disease:50% (n = 39) IIB-IIIC and 8% (n = 6) had metastatic disease. The detection rate of GPVs was 20% (n = 16). Among these 16 patients, the most frequently mutated genes were BRCA1/2 (n=11, 68.5%) and TP53 (n=2, 12.5%). **Conclusion:** The overall detection rate of GPVs was similar from other worldwide studies. In comparison with other Brazilian studies, GPVs in TP53 were at lower rates, possibly because this cohort was enriched by patients from Brazilian Center West and Northeast. Higher rates of advanced disease at BC diagnosis may impact in treatment outcomes. The lack of access to genetic testing in the public health take away the opportunity to cancer prevention, more effective treatments, and proper family risk assessment.

Keywords: hereditary breast cancer syndrome, public health, germline mutation panel

APPROVED COMMENTED POSTER

FAT LOSS SOLUTIONS FOR OVERWEIGHT BREAST CANCER PATIENTS WITH SLEEP DISTURBANCES

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Objective: Obese breast cancer patients obtain lowered pCR rates and experience more neuropathy, anemia, fatigue, and depression during chemotherapy, have more surgery complications: infection, seroma, implant loss and lymphedema, more radiation dermatitis and esophagitis, lower DDFS and OS plus more grade 3 and 4 side effects under anti-HER2 treatments, lower Fulvestrant and Anastrozole efficacy and more AET-related and Alpelisib side effects, the main impact coming from the fact that these are the main cause of treatment non-adherence and discontinuation. By the detrimental metabolic and behavioral impact- the quality of the sleep is one of the patient-related factors important to address when addressing obesity causes to improve oncologic outcome. **Methodology:** Seeking fat loss solutions for overweight ER+ breast cancer patients with sleep disturbances, we randomised 50 –of which 16 were depressive– to follow a high protein diet (D) or the diet and sleep journal interventions (D+SJ) for 8 weeks. Patients ate only when hungry foods high in protein, calcium, omega-3, pre- and probiotics, wrote a daily food journal. Half of the patients were asked to write a 7-day sleep journal (SJ): the time it took them to fall asleep, number of awakenings during the night, how much they slept, how much they stayed in bed, and self-perceived sleep quality. They were asked to follow set sleeping and wake up hours calculated based on their SJ answers, and to not sleep during the day. 8 patients from the D+SJ group left the study, 5 being depressive. We measured body composition with a BIA scale. **Results:** D group lost 2.31±2.86% body fat (p= 0.000), and 0.76±1.16% visceral fat (p=0.000); with no differences between patients with or without depression. D+SJ group improved sleep quality and lost 2.16±2.35% body fat (p= 0.002), and 0.86±1.24% visceral fat (p=0.005); but depressive patients didn't obtain statistically significant results maybe because of the overtiring effect of the SJ intervention. So, both D and D+SJ interventions improve breast cancer patients' body composition despite sleep disturbances. **Conclusion:** Sleep journal interventions improve sleep quality in patients without depression, decreasing weight regain risk.

Keywords: breast cancer, obesity, sleep disturbances, weight loss, depression

APPROVED COMMENTED POSTER

OPPORTUNISTIC MAMMOGRAPHIC SCREENING INDICATORS IN A DECADE IN THE STATE OF GOIÁS: TECHNICAL, SOCIAL AND ECONOMIC CHARACTERISTICS

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Objective: To evaluate indicators of opportunistic mammographic screening performed in the state of Goiás, according to technical, social and economic aspects. **Methodology:** Ecological study, where the Diagnostic Centers (DC) that performed mammography were observed. Data were collected on the characteristics of the equipment, production, value and sources of payment for the exams. For the 2019 data, the following variables were analyzed: imaging technology, availability of mammography devices and estimated production, mammography expenditures and mammographic coverage in the female population aged 40 to 69 years. The ratio of non-SUS and SUS exams and the Composite Annual Growth Rate (CAGR) were also calculated to compare the indicators of opportunistic screening between 2008 and 2019. **Results:** In 2019, 164 mammography machines were identified and of these, 66 met the SUS. This year, 400,896 exams were produced at a cost of R$41,931,120.00. The ratio of expenses between non-SUS and SUS care was 10.3 and the number of tests performed non-SUS and SUS was 3.87. Opportunistic screening coverage was 69.8%, with the share of non-SUS services being 56.3% and SUS only 13.5%. Comparing with the results of the 2008 study, a reduction in CAGR was observed -16.3% for conventional mammography and 17% for digital mammography. The CAGR of the female population was 1.9% and those aged 40 to 69 showed an annual increase of 3.5%. There was an increase in the number of equipment in use with a CAGR of 4.3% per year and an increase in the number of exams of 2.5% per year, the CAGR of mammography coverage was -0.9% per year. **Conclusion:** The indicators show improvement in the technology park. The annual growth of the female population demonstrates an aging population and the increase in the number of exams was just enough to maintain mammography coverage.

Keywords: Breast Cancer; Early Detection; Tracking Programs; Mammography; Health Services.

APPROVED COMMENTED POSTER

DIAGNOSIS OF BREAST CANCER IN BRAZIL: REFLECTION ON THE IMPACT OF THE COVID-19

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Objective: The objective of this work was to verify if the pandemic of COVID-19 impacted the screening of Breast Cancer in women, in Brazil. **Methodology:** This is an observational, cross-sectional study, with a descriptive and quantitative approach, carried out with secondary data provided by the Cancer Information System (SISCAN/DATASUS), considering two temporal clippings - before the pandemic (2015 to 2019) and during the pandemic (2020 and 2021). Women diagnosed with breast cancer who underwent mammography between 2015 and 2021 were included in the study. Review by the Research Ethics Committee was waived because public, aggregated, unidentified data were used. **Results:** Between 2015 and 2021, 17,229,218 mammograms were performed in Brazil. The temporal analysis shows a gradual upward behavior in all years, reaching 49.6% growth in the period before the pandemic (from 2,047,504 mammograms in 2015 to 3,063,618 mammograms in 2019). Already during the pandemic of COVID-19, there was a change in the Brazilian epidemiological behavior, being evidenced a significant drop in the number of examinations performed. In 2020, 1,864,891 mammograms were recorded, representing a 39.1% drop, while in 2021, 2,606,074 mammograms were recorded, representing a 39.7% increase over the previous year, but if compared to the last pre-pandemic year, there is an important decrease in the amount of mammograms performed (14.9%). Besides this, another consequence was the underdiagnosis of some diseases, such as breast cancer. The estimate stipulated by the National Cancer Institute (INCA) for each year of the triennium between 2020 and 2022, was 66,280 new cases of breast cancer in Brazil. As with mammograms, in 2020 there was a 10.3% drop in diagnoses (n=46,509), which represents only 70.2% of the estimate made by INCA for 2020. In the year 2021, this drop was even more significant (n=24,446), representing only 36.9% of the expected for the period. **Conclusion:** Because of the emergence of COVID-19 and the magnitude taken by the pandemic, there was an epidemiological change in public health in Brazil, significantly impacting the screening, monitoring and treatment of diseases with high incidence in the country. It is believed that this panorama will reflect in the increase of cases and their severity, besides impacting the costs for public health worldwide.

Keywords: Breast cancer; COVID-19; Underdiagnosis

APPROVED COMMENTED POSTER

STANDARDIZATION OF THE FICOLL GRADIENT TECHNIQUE FOR THE ISOLATION OF MONUCLEAR CELLS FROM PERIPHERAL BLOOD

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Objective: The objective of this study was the Ficoll gradient technique standardization for the circulating hematopoietic stem cells (HSCs) isolation to the assembly of the peripheral blood mononuclear cells (PBMC) biorepository of Breast Cancer (BC) patients attended in Clinical Oncology Service of Instituto Mário Penna. **Methodology:** The study protocol was approved by the Ethics Committee of Instituto Mário Penna (CAEE 82703418.8.0000.5121). At recommended protocols, 15 mL of blood are used. At first, we adapt this volume due to the limited amounts of samples for research available. Blood was collected in a 9 mL sodium heparin tube. The experiments were performed in 50 mL conical tubes, but with blood volume reduced, no PBMC ring was formed. It was necessary to change to 15 mL conical tubes. Finally, the remaining red blood cells were lysed with ammonium chloride. However, with the reduced volume, this solution lysed the PBMC also.Then, we decided to remove this step from the protocol. **Results:** After this, we obtained 8.06 x106 cells/mm3 with 80% viability. Data were confirmed by Neubauer camera and an automatic cell counter. The HSCs were labeled with antibodies against CD34 and CD133 by flow cytometry. **Conclusion:** In conclusion, the characterization of HSCs is important to link tumor-associated HSCs with malignant and immunosuppressive phenotypes. In this context, studies are in progress with this standardization, and they will permit us to perform the HSCs characterization of BC patients to a better knowledge of tumor microenvironmental.

Keywords: Mononuclear cells, hematopoietic stem cells, Ficoll gradient technique

APPROVED COMMENTED POSTER

EVALUATION OF CYP2D6 POLYMORPHISM IN PATIENTS WITH BREAST CANCER AND TAMOXIFEN USERS OF TWO BREAST SERVICES OF BELO HORIZONTE

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Objective: This study aimed to assess the CYP2D6 * 4 polymorphism and the association of this polymorphism with the evolution of breast cancer since the reduction of the CYP2D6 activity due to polymorphisms of the gene that encodes the enzyme or the use of inhibitory drugs have been linked to reduced levels of endoxifen (EDF) and worse prognosis in women treated with tamoxifen (TAM). The treatment is multidisciplinary TAM is an established and important therapeutic modality. This drugs is metabolized by the CYP2D6 enzyme into it's active metabolites, 4-hidroxitamoxifen (HTF) and endoxifen (EDF). **Methodology:** The study was approved by the local ethical committee (CEP) and registered as CEP number 065/2009. It was a prospective study in witch interviews were conducted by graduated mastologists with 138 patients with breast cancer treated with TAM in two public's outpatient clinics. The inclusion criteria were invasive breast cancer diagnosis and use of the tamoxifen as part of the treatment. Clinical data and blood samples were collected for CYP2D6 genotyping with the Restriction Fragment Length Polymorfism technique. The statistics analysis were made through STATA 10.3 program. **Results:** We observed that 14.5% of patients had recurrence and 30% of premenopausal patients had menstrual cycles. The average disease-free survival was 43.6 ± 45.7 months and the average overall survival was 44.5 ± 46.1 months. Regarding the polymorphism, 81,15% were extensive metabolizers (*1/*1), 16,66% were intermediate metabolizers (*1/*4) and 2,17% were poor metabolizers (*4/*4). The data corroborate with the literature in relation to CYP2D6 polymorphism. **Conclusion:** Considering the high incidence of BC and the wide use of TAM in the treatment of this tumor, conducting research addressing the pharmacogenetics of TAM is of great importance to assess the impact of CYP2D6 polymorphisms in the adjuvant treatment of BC.

Keywords: Breast Cancer, Polymorphism, CYP2D6 gene, Tamoxifen

APPROVED COMMENTED POSTER

TAMOXIFEN ADJUVANT INTERFERERS STUDY (TAIS STUDY): AN EXPLORATIVE ANALYSIS OF (Z)-ENDOXIFEN AND EARLY RECURRENCE OF BREAST CANCER IN A PROSPECTIVE BRAZILIAN STUDY

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Objective: Adherence to treatment and use of co-medication, but also molecular factors such as CYP2D6 genotype affect tamoxifen metabolism with consequences for early breast cancer prognosis. CYP2D6 polymorphisms have been promoted as potential biomarkers, yet they only partially explain the variability of plasma (Z)-endoxifen concentrations. The objective of this study was to evaluate whether plasma (Z)-endoxifen levels predicted early BC events (recurrence or death) within 5 years, in patients receiving adjuvant tamoxifen treatment. The secondary aim was to evaluate whether (Z)-endoxifen levels were associated with clinical, pathological, and phenotypic CYP2D6 metabolism variables. **Methodology:** In a prospective study of 149 tamoxifen-treated early-stage breast cancer patients from Brazil followed-up for 5 years, we investigated the association between the active tamoxifen metabolite (Z)-endoxifen at 3 months and event-free survival (EFS) adjusted for clinico-pathological factors. Here we apply this approach to patients from a Brazilian, prospective cohort (Tamoxifen Adjuvant Interferers Study; TAIS) **Results:** Twenty-five patients (16.8%) had recurred or died at a median follow-up of 52.3 months. When we applied a putative 15 nM threshold used in previous independent studies, (Z)-endoxifen levels below threshold showed an association with shorter EFS in univariate analysis (P=0.045) and after adjustment for stage (HR 2.52; 95% CI 1.13–5.65; P = 0.024). However, modeling of plasma concentrations with splines instead of dichotomization did not verify a significant association with EFS (univariate analysis: P=0.158; adjusted for stage: P=0.117). Hence, in our small exploratory study, the link between impaired tamoxifen metabolism and early breast cancer recurrence could not be unanimously demonstrated. This inconsistency justifies larger modeling studies backed up by mechanistic pharmacodynamic analyses to shed new light on this suspected association and the stipulation of an appropriate predictive (Z)-endoxifen threshold. **Conclusion:** As expected, significant associations with CYP2D6 metabolism phenotypes were detected. In individual and grouped (PM + IM vs. NM + UM) comparisons, PM and IM phenotypes had lower median (Z)-endoxifen levels (7.7 nM and 16.3 nM, respectively) than patients with NM or UM phenotypes (27.6 nM, and 38.0 nM, respectively; P < 0.001).
Using a putative clinical threshold concentration of 15 nM, low plasma (Z)-endoxifen levels were associated with higher rate of early recurrence or death events during follow-up.

Keywords: Tamoxifen, breast cancer, CYP2D6, (Z)-endoxifen

APPROVED COMMENTED POSTER

DOES THE BODY MASS INDEX (BMI) IMPACT THE OVERALL SURVIVAL (OS) OF BRAZILIAN WOMEN WITH BREAST CANCER (BC) WHO HAVE ACHIEVED PATHOLOGICAL COMPLETE RESPONSE (PCR) AFTER NEOADJUVANT CHEMOTHERAPY (NCT)?

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Objective: In this study, we aimed to evaluate the impact of obesity on the survival of patients with BC treated with NCT in two public Hospitals in Brazil. **Methodology:** Retrospective, multicenter study evaluating women with BC at Pérola Byington (HPB) and State Public Servant (HSPE) Hospitals, between January/2011 and May/2020. Stages I to III, age ≥18 years, who underwent NCT. Patients categorized by World Health Organization definition: BMI <18.5 kg/m2: malnutrition; 18.5 to <25 kg/m2: normal; 25 to <30 kg/m2: overweight; ≥30kg/m2: obesity. pCR was defined as the absence of invasive breast and axillary tumor. T test or chi-square test used to individually analyze the association of each variable between groups with and without pCR. Univariate and multivariate analyzes to calculate odds ratios, 95% confidence intervals of the independent variables BMI, age, clinical stage, correlated with pCR, with p value <0.05 as statistically significant. **Results:** We enrolled 1779 patients, mean age 50 years, mean BMI of 28.08 kg/m2. Most of them, in stage III (68%), ductal hystological type (95.11%). After NCT, 1435 had residual disease and 344 had pCR. BMI ratio was 1.57% malnutrition, 30.58% normal, 35.13% overweight and 32.72% obese. When the pCR was associated with BMI, there was no significance on OS when evaluating separate centers (HPB :p 0.46, HSPE: p 0.49) or together (p 0.83). Disease free survival was only possible to be done in HPB without significance (p 0.83) for BMI. **Conclusion:** This Brazilian study showed no interference of BMI on OS in patients submitted to NCT with rPC. There were few patients achieving pCR (19.34%) probably because of initial stage. Despite not having an impact on survival, most of our women were overweight or obese (72.85%), showing how obesity is frequent in Brazilian women and should be understood as a public health problem.

Keywords: breast cancer, neoadjuvant chemotherapy, overweight response, BMI

APPROVED COMMENTED POSTER

NEOADJUVANT CHEMOTHERAPY OF BREAST CANCER WITHOUT FURTHER SURGICAL INTERVENTION

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Objective: Neoadjuvant chemotherapy (NCT) is an accepted treatment approach for locally advanced and some early-stage breast cancers. The last years' developments in systemic NCT have progressively increased pathological complete response (pCR). As a result, breast surgeons sometimes perform surgery on breasts that contain no tumor cells. This study sought to evaluate the survival outcomes for patients with cCR to NCT who did not undergo surgery. **Methodology:** This retrospective study has been carried out at the Oncology clinic of Azerbaijan Medical University. The study identified 108 women with a diagnosis of invasive breast cancer cT1-4, N0-3, and M0 tumors who received NCT between 2013 and 2018 and did not have surgery. Overall survival (OS) was compared between the cCR group and no-cCR group patients after NCT. **Results:** In patients who did not undergo surgery, 44 (40.7%) had cCR, 51 (47.2%) had a partial response and 13 (12.0%) had no response/progression. The median age was 45.6, median tumor size 51.2 mm, immunohistochemistry were: luminal 53 (49.1%), HER2+ 31(28.7%) and triple-negative 24 (22.2%). With a follow-up of 48-108 months. The 5-year OS was better in the cCR group than in the no-cCR group (90.9% vs 61.5%; p = 0.011). **Conclusion:** To be able to avoid surgery, it is critical to have the tools to accurately detect residual tumor disease and predict pCR after NCT. This study demonstrated that active surveillance or de-escalation therapy may be an option for patients who achieve cCR. Prospective studies are underway to determine whether a subgroup of patients may forgo surgery in the setting of cCR after NCT.

Keywords: Breast surgery, Neoadjuvant chemotherapy, de-escalation therapy

APPROVED COMMENTED POSTER

ADHERENCE TO ADJUVANT ENDOCRINE THERAPY AND ITS DETERMINING FACTORS IN PATIENTS WITH BREAST CANCER

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Objective: This study aims to investigate the adherence rates to adjuvant hormone therapy in patients with early stage breast cancer. **Methodology:** Breast cancer patients with early invasive disease who are being treated with adjuvant hormone therapy for at least 6 months in a private oncology service were evaluated for adherence rates. Data collection was done with RedCap software. MMAS-8 scale was used to assess adherence to treatment, dividing patients into three groups: low (< 6 points), medium (6 to 8 points) or high adherence (8 points). Demographic and clinical characteristics were assessed with the three adherence groups. **Results:** From June to December 2021, a total of 60 patients were recruited. Median age was 60.3 years and 23.3% were premenopause. About demographic statistics, 80% has a college degree, 35% live alone, 30% has comorbidities. About breast cancer, 50% were stage I, 50% received chemotherapy, 10% received HER2 blockade and 26 patients (43.3%) used Letrozole. Analyzing adherence, 45% had low/medium adhesion and 55% had high adhesion. There were no association between adherence rates and demographics, clinical and pathological characteristics, except for ECOG Performance Status (PS). All patients with PS ECOG 1 had low/medium adherence (p=0.036). More patients who live alone had low or medium adherence, whereas more patients who live together had high adherence. There was no difference regarding the type of hormonal treatment and adherence. **Conclusion:** Preliminary results show high adherence in only 55% of patients, lower than reported in previous studies. This result draws attention because it can compromise survival. We will continue the recruitment of patients in the private service and start in the public service to assess the rate of adherence in a larger population and the relationship with demographic characteristics.

Keywords: Hormone Therapy; Breast Cancer; Medication Adherence.

APPROVED COMMENTED POSTER

BBCS BRAZILIAN BREAST CANCER SYMPOSIUM 2022

APPROVED POSTER

01

INFLUENCE OF COVID-19 ON BREAST CANCER DIAGNOSIS AND FOLLOW-UP IN BRAZIL

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Objective: To verify the impact of the COVID-19 pandemic on the expected number of breast cancer diagnoses in Brazil. **Methodology:** This is an observational, cross-sectional, analytical study conducted using secondary data collected from the Cancer Information System (SISCAN/DATASUS), analyzing two time slices (2020-2021 and 2021-2022). Women diagnosed with breast cancer who underwent mammography between 2020 and 2022 were included in the study. Research Ethics Committee review was waived because aggregated public data were used, without identifying participants. **Results:** In the data collection conducted in 2021, it is possible to see underdiagnoses of breast cancer in the year 2020, which only 22,167 new cases were reported, when about 66,280 cases were expected. However, in 2022, with the update of the data in SISCAN/DATASUS, it was observed that in addition to underdiagnoses, there was a scenario of underreporting, since in 2022, the number of diagnoses was about 47,557 new cases of breast cancer in 2020 in Brazil. This scenario reflects the epidemiological health overload resulting from the pandemic, resulting in neglected attention to other diseases of high incidence, such as breast cancer. **Conclusion:** During the pandemic of COVID-19, a significant underreporting of breast cancer diagnoses was observed in Brazil, affecting epidemiological monitoring. It is believed that this scenario will reflect not only on the increase of severe cases of breast cancer, but also on public health expenses.

Keywords: Breast Cancer, COVID-19, Underreporting

COMPARATIVE ANALYSIS BETWEEN SCREENING MAMMOGRAPHY PERFORMED IN PATIENTS AT USUAL RISK AND PATIENTS AT HIGH RISK FOR BREAST CANCER

02

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Objective: To analyze the incidence of reports highly suggestive of malignancy in patients undergoing mammography in Brazil between 2013 and 2021. **Methodology:** This is a retrospective and analytical cross-sectional study. A retrospective analysis of the reports available in the cancer information system (SISCAN) was performed, comparing the incidence of BI-RADS 4 (B4) and BI-RADS 5 (B5) reports between high-risk women (HRW) and women at risk. (WAR) for breast cancer. Those registered in the system as high risk, positive family history or personal history of breast cancer were considered HRW. The B6 reports were excluded from the analysis, since they are not a screening test, but a follow-up test. **Results:** Of the total, 31,045 HRW had B4 on mammography, 76,329 WAR had B4 on mammography, 6,484 HRW had B5 and 12,757 WAR had B5. Using SPSS Statistics software, the difference in proportion between them was calculated and it was observed that being an WAR is a protective factor when compared to HRW for the diagnosis of B4, with the relative risk (RR) being 0.5412 (CI 95 % 0.5341 - 0.5483) for B4 and RR 0.433 (95% CI 0.4203 - 0.4462) for B5. The number needed to cause harm (NND) was also evaluated, which showed that 203 (95% CI 198 - 209) mammograms with B4 in HRW are needed to diagnose a B4 in WAR and that 788 mammograms with B5 in HRW (95% CI 754 - 825) are needed to diagnose a B5 in WAR. **Conclusion:** Our study showed an increased prevalence of reports suggestive of malignancy in high-risk patients when compared to usual-risk patients. Such findings may mean that high-risk patients have a higher prevalence of malignancy, but also that physicians analyze high-risk patient exams more carefully, increasing the rate of reports suggestive of malignancy in these patients.

Keywords: Mammography; Screening; Breast Cancer.

APPROVED PAPERS FOR POSTER

VACUUM ASSISTED EXCISION (VAE): A POTENTIALLY APPROACH FOR PERCUTANEOUS TREATMENT OF SMALL BREAST TUMORS

03

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Objective: Evaluate vacuum assisted excision (VAE) for percutaneous treatment of breast cancers. **Methodology:** Retrospective analysis of 1061 vacuum assisted biopsies (VAB) and VAE for diagnostic purpose of suspicious breast lesions in a breast unit between 04/13/2017 – 11/28/2020. In total, 116 cases with complete data from VAB/VAE and surgical excision were evaluated. Excision following VAB/VAE was defined as complete resection (CR) if there was no residual tumor, minimal residual disease (MRD) if residual tumor ≤3mm, gross residual disease (GRD) if residual tumor ≥3mm and upgrade from DCIS on VAB/VAE to invasive cancer. CR and MRD were combined as potentially resected and treated percutaneously (PRTP). GRD and those with upgrade to invasion were determined not suitable for percutaneous treatment. **Results:** Median age was 55.6 years (20-91; SD 12.27), median tumor size on imaging was 11.6 mm (4-88; SD 10.59). Of the 116 tumors, 29 (25%) were CR, 18 (15.5%) MRD, 64 (55.2%) GRD and 5 (4.3%) upgrade from DCIS to invasion. There were 47 (40.5%) tumors which were PRTP, of which 10 (21.,3%) were DCIS and 37 (78.,7%) were invasive disease (12 pure IC, 24 IC + DCIS and 1 DCIS with microinvasion). In multivariate analysis a VAE procedure (p=0.008, OR: 4.4, 95% CI), low/intermediate nuclear grade (p=0.000, OR: 12.5, 95% CI) and final T ≤ 10mm (p=0.000, OR: 50.1, 95% CI) were associated with PRTP. In this retrospective analysis, the probability of PRTP of low/intermediate grade tumors smaller than 10mm undergoing VAE was 84.58%. **Conclusion:** This data suggests that low/intermediate grade pT1a/b breast tumors can be completely excised with percutaneous VAE. Based on this, small (≤10mm) IC of low/intermediate grade could be considered for entry to prospective randomized trials of VAE for local treatment, with long term follow up to assess recurrence rates. Standardization of the procedure should be recommended.

Keywords: vacuum assisted excision, breast cancer, percutaneous treatment

OBSTACLES FACED BY BREAST CANCER PATIENTS: FROM EARLY DIAGNOSIS TO TREATMENT DIAGNOSIS TO TREATMENT

04

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Objective: The objective of this study was to evaluate the factors that influence the early detection initiation of treatment of patients with breast cancer **Methodology:** This is a cross-sectional, descriptive study, conducted between January/December 2020. A structured was carried out with 102 patients from a tertiary service in the central region of Brazil. **Results:** There was a prevalence of women aged 41 to 60 years (66%), of brown ethnicity (56.9%) and who had completed elementary school (52.9%). In total, 58.8% of women sought the health service annually and 50.0% said had never realized MMG before the initial symptom, being "nodule" the most cited finding (80,4%). Among the difficulties faced in making the first appointment, fear of the diagnosis was the most cited (83.3%). Mammography and biopsy were performed in 56.9% and less than four weeks in 56.9% of cases, respectively. On the other hand, return with the result of mammography and biopsy in 67.6% and 71.6%, respectively. In 77.5% of the cases, the specialist consultation after the biopsy occurred within less than four weeks, and the beginning of treatment in 53.9% of the sample. As for the tumor characteristics, 61.8% of the patients had a positive axilla, 48.0% tumor stage (G2) and 21.6% with IIIB staging. We observed a predominance of Luminal HER tumors (33.3%) and a mean Ki67 of 33.46% (± 21.22), with 8.8% of patient's metastatic patients at diagnosis. **Conclusion:** In this sample of women users of the public health service, it was observed low awareness and low mammography coverage, culminating in a higher prevalence of advanced stages at diagnosis. O confronting the obstacles related to the diagnosis and treatment of breast cancer can attenuate the socioeconomic differences and improve the oncological outcomes in this population.

Keywords: Keywords: Breast Neoplasms, Unified Health System, Early Cancer Detection, Women's Health.

APPROVED PAPERS FOR POSTER

CHEMOTHERAPY TREATMENT REDUCES NEUROMUSCULAR AND FUNCTIONAL CAPACITY PERFORMANCE, BUT NOT THE PERCEPTION OF EXERTION OF WOMEN WITH BREAST CANCER

05

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Objective: Compare the effects of chemotherapy cycles on neuromuscular performance and rated perceived exertion of women with breast cancer **Methodology:** Twenty-one women divided into a treatment group (TG) (n = 9) and control group (CG) (n = 12), women in the TG had been diagnosed with breast cancer and were performing chemotherapy (anthracyclines). Neuromuscular and functional capacity performance (ND) analyses were performed and rated perceived exertion (RPE) between the 2nd and 3rd cycle of chemotherapy (Baseline), as well as post-treatment. The electromyograph was used to evaluate the DN, root mean square values of the rectus femoris and vastus medialis muscles were analyzed during the 30-second sit to stand functional capacity test and RPE after the test (Borg scale). The anova two-way test was used to compare the variance of the means between the moments and groups (significance $p < 0.05$) **Results:** The GT and CG differed at baseline in the ND of the vastus medialis (188.2 ± 125.3 and 313.6 ± 142.7, respectively; $p = 0.02$), rectus femoris (138.3 ± 63.1 and 298.5 ± 176.9, respectively; $p = 0.01$) and sit to stand test (18.2 ± 3.6 and 29.1 ± 4.1, respectively; $p = 0.00$). As well as post-treatment ND of the vastus medialis (172.7 ± 121.2 and 352.3 ± 198.3, respectively; $p = 0.01$), rectus femoris (150.5 ± 66.8 and 406.6 ± 282.1, respectively; $p = 0.00$) and sit to stand (18.5 ± 2.8 and 28.5 ± 2.4, respectively; $p = 0.00$). However, no difference significant in the RPE between GT and CG in the baseline (10 ± 2.7 and 11 ± 2.8, respectively; $p = 0.33$) and post-treatment (11.8 ± 3.3 and 11.7 ± 3.1, respectively; $p = 0.98$) **Conclusion:** Chemotherapy seems to significantly attenuate ND, but not RPE of women with breast cancer when compared to healthy women

Keywords: Chemotherapy and muscle strength; Breast câncer and perceived exertion; chemotherapy and muscle electromyograph

APPROVED PAPERS FOR POSTER

THE COVID-19 PANDEMIC AND LOSS OF BREAST RECONSTRUCTION SERVICES: HAS IT AFFECTED PATIENT QUALITY OF LIFE AND WELLBEING?

06

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Objective: Breast reconstruction has better post-operative quality of life (QoL) outcomes compared to mastectomy. The COVID-19 pandemic led to restrictions across the NHS, including breast reconstruction services. Breast reconstruction was unavailable in Aberdeen Royal Infirmary from March to September 2020. This study aims to determine; how many patients were affected and how this restriction has impacted patients' physical, psychosocial and sexual wellbeing. **Methodology:** Patients who underwent mastectomy or breast reconstruction surgery in Aberdeen Royal Infirmary from 18th September 2019 to 18th September 2020 were identified from admissions lists. Breast Q questionnaires were administered via post to all eligible individuals. Participants were asked if they would have preferred reconstruction had it been offered. QoL scores were compared between 2 groups; 1) patients who underwent breast reconstruction prior to restriction of services and 2) patients who were not offered but would have preferred reconstruction. Data analysis was carried out using SPSS statistical software. **Results:** 164 patients underwent procedures during the period, of which 147 were eligible to participate. 105/147 (71.4%) completed questionnaires were returned. Of those who had a procedure post-COVID restrictions, 15 (27.8%) stated they would have preferred reconstruction had it been offered. Lower QoL scores were observed in group 2 compared to group 1 in both psychosocial wellbeing (medians 49 and 63 respectively, p=0.022) and sexual wellbeing (medians 37.5 and 51.5 respectively, p=0.026). **Conclusion:** Loss of breast reconstruction services affected 27.8% of patients. We demonstrate the negative impact this had on psychosocial and sexual wellbeing, which should inform decisions regarding service provision in future.

Keywords: Breast Reconstruction. Breast Cancer. Quality of Life

A RETROSPECTIVE ANALISE OF 4.466 LUMINAL BREAST CANCER TREATED IN A REFERENCE CENTER

07

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Objective: To evaluate HER2 negative Estrogen receptor (ER) and or Progesterone Receptor positive (PR) and describe treatments and overall survival (OS) of patients treated in a Reference Center. **Methodology:** We've enrolled retrospectively 5,510 patients in Perola Byington 'database from 2010 to 2021. After excluding patients without minimal complete records, a total of 4,855 were analyzed and clinical and pathological data was collected (date of diagnose, first treatment, type of treatment, stage, type of surgery, DFS and OS. This study was approved by our ethics committee. **Results:** Most of our patients were diagnosed in stage I (26,9%) and II (38,2%). There was 23,4% in stage III and only 3,1% in stage IV and 5,7% in stage 0, in 2,6% the information was not complete. Mean age at diagnosis was 57.6 years. We identified 4,761 (86.4% of 5510) patients who underwent 4,848 surgical procedures. Of the total, 47.2% were mastectomies, 50.9% sectorectomy and 1.9% were adenectomy or adenomastectomy. Immediate reconstruction was done in 470 patients (69.8% underwent reconstruction with an expander, 22.3% with flap rotation and 7.9% reconstruction with implants). The mean and median time between diagnosis and the beginning of treatment was analyzed, in the sample it was observed that patients who were diagnosed in stages I, II and IV had the same mean of 2.6 months, but stage IV had the lowest median 1 ,9 months. OS for patients diagnosed in stages I and II did not reach the median in the available period, for patients in stages III and IV, a median of 80.4 months and 41.2 months of overall survival was identified, respectively. **Conclusion:** These are the first results of this large cohort of luminal patients treated in the public service of a referral center. Most patients are diagnosed in stage I or II and more than half undergo conservative surgery. Immediate reconstruction is not routinely performed. Stage III survival is 80.4 months and stage IV survival is 41.2 months in this analyses.

Keywords: Luminal Breast Cancer, treatment, survival

APPROVED PAPERS FOR POSTER

OVERVIEW OF MAMMOGRAPHY IN GOIÁS BETWEEN 2016 AND 2021

08

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Objective: Outline clinical-epidemiological characteristics of women undergoing mammography in the State of Goiás from 2016 to 2021. **Methodology:** Cross-sectional ecological study of women who underwent mammography between 2016 and 2021 in the state of Goiás. The DATASUS database of the Cancer Information System (SISCAN) was used, where age group, municipality of residence and clinical indication were applied for analysis. **Results:** Between 2016 and 2021, in Goiás, 451,589 mammograms were performed in women aged 9 years to over 79 years, with an average of 75,265 mammograms per year. In 2019, 89,868 procedures were performed, which was the highest number recorded in the analyzed period. On the other hand, 2020 had lower demand, totaling 50,263 mammograms. As for the clinical indication, of the 365,152 requested mammograms, 354,370 aimed at screening, mainly for the high-risk population that includes women with a family history of breast cancer, representing 8,617 exams. In addition, 13,853 mammograms had a diagnostic objective based on suspicious clinical findings and 5,432 patients underwent mammography for previous treatment of breast cancer. The age group that most underwent mammograms was 50 to 54 years old, totaling 17.3% of the total. In Goiânia, the rate of mammography performed, from 10 to 79 years old, was 4.8% and São João da Paraúna registered the highest rate, 20.5%. Goiânia, Aparecida de Goiás and Anápolis lead the ranking of mammograms performed, representing 53% of procedures performed in the state. **Conclusion:** It is possible to infer, through the analysis, that there is a disproportionate distribution of health resources in the territory of Goiás. In addition, the reduction in the number of mammograms in 2020 is correlated with the COVID-19 pandemic, allowing the loss of early diagnoses in many women, thus contributing to an unfavorable prognosis in the future.

Keywords: Mammographic; Breast; Woman

THE INFLUENCE OF MAMMOGRAPHIC SCREENING OF THE UNIFIED HEALTH SYSTEM (SUS) ON THE STAGING OF BREAST CANCER IN BRAZIL AND FEDERATIVE UNITS

09

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Objective: To evaluate the influence of mammographic screening performed by the Unified Health System (SUS) on the staging of breast cancer in Brazil, Macroregions, Federation Units and the Federal District. **Methodology:** An ecological study where data available in the DATASUS Information Systems were analyzed, from the female population aged 50 to 69 years, on the number of mammograms performed in the period from 2008 to 2021, and the number of patients diagnosed with cancer breast cancer in 2021, according to staging. Exam coverage was calculated and regression analyzes performed by JoinPoint to estimate the Annual Percent Change (APC) in coverage. The APC results were compared with the percentage of tests reported with stages III and IV, for Brazil, the Federation Unit and the Federal District. **Results:** Brazil showed a tendency to increase mammographic coverage from 2008 to 2014 (APC: 10.2^; p<0.01) and from 2014 to 2021, a tendency to decrease (APC: -6.7^; p<0.01). Of the five macro-regions, four showed downward trends in the last analyzed period. 14 UF and DF showed a tendency to decrease, 10 UF showed stabilization and only two showed a tendency to increase the coverage of exams. In Brazil, of the 10711 records of exams registered in chemotherapy and radiotherapy treatments, 52.6% were with staging III and IV and 47.4% 0, I and II. Of the UF 18 and the DF, the percentage of exams with staging III and IV was above 50%. **Conclusion:** The results presented show a tendency to reduce the coverage of mammographic screening performed by the SUS over the period and it can be inferred that the low coverage of screening directly influences the high percentage of patients with more advanced staging of the disease.

Keywords: Breast Cancer; Early Detection; Tracking Programs; Mammography.

APPROVED PAPERS FOR POSTER

BREAST CANCER TREATMENT DELAY ASSOCIATED FACTORS IN NORTHERN MINAS GERAIS

10

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Objective: Breast cancer treatment delay can lead to advanced stages of the disease and higher associated mortality. The north of Minas Gerais is a transition area between the Southeast and Northeast of the country, has a vast territorial extension and has a great social need, where no previous studies on breast cancer diagnosis and treatment delay. Thus, the objective of the present study was to analyze the time elapsed between detection, diagnosis and treatment in patients with breast cancer treated at a High Complexity Care Unit in Oncology (UNACON) in the north of Minas Gerais, identifying breast cancer treatment delay associated factors. **Methodology:** This is a retrospective cohort study which evaluated secondary data, analyzing the total interval (defined as the time elapsed from the first symptom or mammographic abnormality to treatment initiation) and associated factors to treatment delay in breast cancer patients at an oncology referral center in the north of Minas Gerais. Logistic regression model was used to define the associated factors, assuming a significance of up to 5% in the final model. Three hundred medical records were analyzed between 2016 and 2018. All ethical precepts for conducting the research were respected. Data collection was authorized by the health institution. The research project was approved by the Research Ethics Committee of the State University of Montes Claros (nº 3.840.184/2020) as recommended by the guidelines of Resolution No. 466/2012 of the National Health Council of the Ministry of Health. **Results:** The median time of the total interval was 179,5 days, with 76.0% of patients presenting delay in treatment initiation. The chances of delay in the total interval were greater in patients with lower education (OR = 2,01), with access to public cancer centers (OR = 4,47), patients diagnosed by clinical examination (OR = 2,24) and with brown and black skin color (OR = 2,00). **Conclusion:** An important delay in treatment initiation for breast cancer patients was observed, and the associated variables highlight social inequalities. Therefore, it is recommended that more equitable strategies for women's health care are adopted in Northern Minas Gerais.

Keywords: Breast Neoplasms; Delayed Diagnosis; Time-to-Treatment; Mass Screening; Health Services Accessibility.

APPROVED PAPERS FOR POSTER

LIPOFILLING IN BREAST CONSERVING SURGERY; OUR EXPERIENCE IN MANSOURA

11

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Objective: Breast conserving surgery is gaining acceptance, because of good aesthetic results and patient's satisfaction. However, it should be refined, because of some cosmotic unsastisfaction. Lipofilling has been widely used to improve these poor cosmetic results; this consists of transference of autologous fat from (abdomen or flanks) to the breast. The fat tissue is harvested and centrifuged to obtain concentrate rich in stem cells. Our study aimed to evaluate the use of lipofilling for partial breast reconstruction following BCS for breast cancer considering aesthetic outcome, patient satisfaction and postoperative complications. **Methodology:** Our study enrolled 20 breast cancer patients prepared for BCS in Oncology Center Mansoura University; included criteria; Patients with early breast cancer, Patients with Cup A and B breasts desiring BCS. Aesthetic outcomes were evaluated by photographs within 6 months or more from surgery by a blinded surgeons separate team (3 independent observers) using a Thomson et al. scale. Patient satisfaction was estimated within 6 months or more from surgery using also the same scale. **Results:** The BMI mean ±SD of patients was 34.93± 5.24 kg/m2. The commonest techniques used were Traditional lumpectomy and Medial mammoplasty. As regard Patient satisfaction; Regarding Size; 65 % of patients had "score 5", for Shape 50 % had "score 4",in symmetry 65 % had "score 4", for scar appearance 50% had "score 4", for skin color 70% had "score 4" and for Overall Cosmosis 50% had "score 4"in other hand regading"3 blinded Doctors" 95 % mentioned Size had "score 5", 70 % for Shape and 70 % for symmetry had "score 4", 65% had "score 4" for skin color , 55% had "score 4" for scar appearance and 70% had "score 5" for Overall Cosmosis. After one month, five patients developed seroma largest was 3*5 cm in 1 patient, After 6 months, 3 patients developed traumatic fat necrosis. **Conclusion:** Lipofilling in BCS is a simple technique provides restoration of shape and volume, with natural texture of the breasts. This technique can replace complex procedures such as prosthetics and flaps with few complications.

Keywords: Lipo filling - breast conservative - oncoplasty

APPROVED PAPERS FOR POSTER

FEATURES AND PROGNOSIS OF STAGE I-IV BREAST CANCER SUBTYPES AT THE CLINICAL HOSPITAL OF BOTUCATU MEDICAL SCHOOL – UNESP

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Objective: The present study is proposed to assess the survival of patients with breast cancer according to the molecular classifications estimated by IHQ and to evaluate the importance of Ki67 proliferation index in the distinction of luminal subgroups and as a prognostic factor of Brazilian women with breast cancers in clinical stage I-IV. **Methodology:** This is a retrospective observational cohort study that included 842 patients with invasive breast cancer diagnosed between 2009 and 2016 and that were treated at the Clinical Hospital of Botucatu Medical School – UNESP. Data collection was performed from June 2020 to May 2021 with the observation of a minimum survival time of 5 years and a maximum of 12 years. The study was approved by the institution's ethics committee. Inclusion criteria were women with at least 18 years of age that were diagnosed with invasive breast carcinoma registered as new cases in stages I-IV between 2009 and 2016 and whose treatment was initiated at Clinical Hospital of Botucatu Medical School – UNESP. Data were collected from electronic medical records and inserted into an Excel spreadsheet. After this evaluation, breast cancer was categorized into five molecular subtypes based on immunohistochemical profiles according to the following classification:
1- Luminal Ki67 > 10% Classification
"Luminal A": ER positive, PR positive, HER2 negative and Ki67 ≤ 10%
"Luminal B": ER positive, PR positive or negative, HER2 negative and Ki67 > 10%
"Luminal B-HER2 positive (hybrid): ER positive, PR positive or negative, HER2 positive, any Ki67 index
"HER2-enriched": ER negative, PR negative and HER2 positive with any Ki67 index
"Triple negative": ER negative, PR negative, HER2 negative with any Ki67 index
2- Luminal Ki67 > 20% Classification
"Luminal A": ER positive, PR positive, HER2 negative and Ki67 ≤ 20%
"Luminal B": ER positive, PR positive or negative, HER2 negative and Ki67 > 20%
"Luminal B-HER2 positive (hybrid): ER positive, PR positive or negative, HER2 positive, any Ki67 index
"HER2-enriched": ER negative, PR negative and HER2 positive with any Ki67 index
"Triple negative": ER negative, PR negative, HER2 negative with any Ki67 index
Another stratification using only Ki67 index as reference was performed:
3- Ki67 > 10% Classification
Group 1: Ki-67 ≤ 10%
Group 2: Ki-67 > 10%
After this evaluation, breast cancer was categorized into five molecular

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“Triple negative”: ER negative, PR negative, HER2 negative with any Ki67 index
2- Luminal Ki67 > 20% Classification
“Luminal A”: ER positive, PR positive, HER2 negative and Ki67 ≤ 20%
“Luminal B”: ER positive, PR positive or negative, HER2 negative and Ki67 > 20%
“Luminal B-HER2 positive (hybrid): ER positive, PR positive or negative, HER2 positive, any Ki67 index
“HER2-enriched”: ER negative, PR negative and HER2 positive with any Ki67 index
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Another stratification using only Ki67 index as reference was performed:
3- Ki67 > 10% Classification
Group 1: Ki-67 ≤ 10%
Group 2: Ki-67 > 10%
4- Ki67 > 20% Classification
Group 1: Ki-67 ≤ 20%
Group 2: Ki-67 > 20%

Statistical analysis
Initially, a descriptive analysis was performed with the calculation of mean and standard deviation for continuous variables and frequencies and percentages for categorized variables The primary outcome was overall survival (OS) and secondary outcome was cancer–specific survival (CSS). Overall survival was defined as the time interval between date of diagnosis and date of death (related to breast cancer or death from any cause). Cancer-specific survival was defined as the time interval between date of diagnosis and date of death related to breast cancer. Follow-up data were collected between October 2020 and May 2021. To calculate survival outcomes, the Kaplan-Meier estimator was used followed by the log-rank test and the Sidak test for comparison between groups. A Cox proportional hazard model was used to analyze the association between different subgroups and survival. The chi-square test was used to study the association of variables and to compare proportions. A level of significance of 5% or the corresponding p value was adopted in all tests. The analyses were performed using the Statistical Analysis System 9.4 program (SAS). **Results:** A total of 842 patients with breast cancer were included in the study. Clinical features are shown in Table 1. Mean age was 56.4 years, 35.9% of patients were 50 years or younger and 64.3% were postmenopausal. Most patients (60.9%) had only elementary education and 14.3% had higher education level. Nulliparous women accounted for 9.5% of cases and 26.1% of patients had a first- or second-degree family history of breast or ovarian cancer.
Considering the anatomical staging, most cases (63%) were in stage I or II and 6.9% in stage IV. Histological grade 3 was observed in 39.4% of the cancers and 73.4% of the patients had ER positive tumors, 62.4% PR positive tumors and 21.2% HER 2 positive tumors. Luminal (HER2 negative) subtypes accounted for 47.2% of cases, followed by TN (15.2%), Luminal B-HER2 positive (14.1%) and HER2-enriched (7.3%). As for the Ki67 proliferation index, in 24.5% of cases it was ≤ 10% and in 42.8% of cases it was > 20%. Conservative surgical treatment was performed in 47% of cases and mastectomy with immediate reconstruction in 13.4% of patients. Most patients underwent systemic chemotherapy (76.9%) and radiation therapy (82.7%). It was observed that, regardless of the subgroup, most patients were in stage II. With regards to Ki 67 index, 84.9% of patients with Ki67 ≤ 10% were in stage I and II and 38.1% of patients with Ki67 > 20% were in stage III and IV. TN tumors accounted for 47.7% of cases in patients younger than 40 years, 23.4% of tumors between 40-50 years and 15.2% of tumors in patient older than 50 years of age. Luminal subtypes accounted for 30.1% of tumors in patients younger than 40 years, 45.6% of tumors between 40-50 years and 59.7% of tumors in patient older than 50 years of age. Considering Ki67, 75.8% of patients younger than 40 years had the index greater than 20% and only 13.4% had a Ki67 ≤ 10%. Between 40 and 50 years, 62.6% of patients had a Ki67 > 20% and 23 .1% had a level ≤ 10%. In patients older than 50 years, ki67 was higher than 20% in 46.4% and ≤ 10% in 37.8% of cases. Luminal A tumors (regardless of the Ki67 cutoff) had the lowest rates of chemotherapy, in which one third of patients with this subtype did not undergo chemotherapy. Patients with triple-negative and luminal B (Ki67 > 20%) tumors were the groups that mostly

underwent systemic cytotoxic treatment (89% of the patients). Patients with a Ki67 ≤ 10% did not undergo chemotherapy in one third of cases whereas 91.8% of patient with Ki67 > 20% underwent systemic treatment. When assessing the type of surgery according to tumor subtype, mastectomy was more performed in the HER2-enriched group, corresponding to 41.9% of the surgeries performed in this tumor subtype. As for conservative surgery, it was more frequently performed in the Luminal group A (Ki67 ≤ 20%), corresponding to 58.2% of the cases of surgery in this subtype. The group with the highest percentage of reconstruction was the Luminal B-HER2 positive, in which the mastectomy followed by reconstruction corresponded to 20.3% of cases. Survival rate was 94.4% in stage I, 85.2% in stage II, 64.7% in stage III, and 19.6% in stage IV. Overall survival was 78.2%. Figures 2 and 3 show breast cancer-specific survival curves according to tumor subgroups. A better survival was observed in the Luminal A subgroup (88.9%), regardless of the Ki67 cutoff (10% or 20%) and a worse survival was observed in the triple negative subgroup (60.5%). In figures 3 and 4, survival curves of the patients according to Ki67 index are shown. Worse survival rates were observed in the groups with a higher Ki67 index, both in those groups with a Ki67 > 10% and > 20%. **Conclusion:** Our study is in accordance with some findings of the AMAZONA study . A higher percentage of breast cancer diagnosis in the population under 50 years of age and a lower percentage of initial breast cancer was observed in our study when compared to data from high-income countries. We also observed that survival was related to staging as shown in previous studies from developed countries. Another finding was that classification of breast tumors by immunohistochemistry reflects different survival curves between Luminal A, hybrid, HER2-enriched and TN groups regardless of Ki67 level. Although we were unable to establish a cut-off that would separate survival rates between luminal groups, Ki67 had an independent prognostic value, and high values of this marker were associated with a greater use of chemotherapy.

Keywords: breast cancer, Ki-67, survival, molecular classifications

FREE NIPPLE GRAFT: CURRENT INDICATIONS AND APPLICATIONS OF A CENTENARY BREAST SURGERY TECHNIQUE - A LITERATURE REVIEW

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Objective: This literature review seeks to provide an updated synthesis of knowledge about the free nipple graft (FNG) technique and its outcomes relates to aesthetics satisfaction, functionality and safety profile, as well as to analyze its incorporation and applicability in several interventions areas involved in mastology such mammaplasty, transgender and oncoplastic surgery. **Methodology:** A structured electronic literature search was conducted, using PubMed and LILACS databases. The search strategy consisted of the keywords, MeSH terms, and free text words for the free nipple graft and its aplication in mammaplasty, transgender and oncoplastic surgery. **Results:** A total of 397 articles were found and, after inclusion and exclusion criteria, 15 were selected. Their outcomes has shown, despite lackness of standardized scores to postulate better scientific evidence on its use and indications, that the technique, analyzed in over 1290 patients, achieved high safety rates and reproducibility. Aesthetics and patients satisfaction were ¬¬¬¬positives and recommended by the authors in different studies discussed in this present article. Despite these considerations regarding methodological and articles limitations, it is important to emphasize a broad applicability of FNG technique, and its limited dissemination and use in breast surgery . Notwithstanding inconveniences related to FNG technique, such total loss of nipple sensibility, areolar depigmentation, and flattening of the papilla over time, it is also necessary to reinforce the low rate of loss of graft. Moreover, in cases of oncological surgeries, in which maintaining NAC would not be possible after mastectomy in ptotic or bulky breasts, FNG may be used for the maintenance of the nipple areolar complex or correction of malposition of it after conservative ou radical mastectomies. **Conclusion:** The literature data analysis provides a broad view of possibilities in breast surgery using the FNG technique and its safety profile. This study represents a potential impact on both experienced and learner surgeons when providing the most complete and updated information about a technique with a large spectrum of intervention in either mammaplasty, oncological and transgender surgery. Still, we reinforce the need for adequate interventional trials and standardized aesthetic functional scores in order to define with a better level of evidence the usefulness of FNG.

Keywords: free nipple graft; mammaplasty; transgender; breast neoplasms

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INFLUENCE OF THE TYPE OF CRITERIA USED FOR CLASSIFICATION OF THE BEST STUDIES IN MEDICAL EVENTS

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[1]Evaluating Committee. Brazilian Breast Cancer Symposium 2021

[2]Mastology Editorial Board

[3]Organizing Committee. Brazilian Breast Cancer Symposium 2021

Objective: To evaluate the impact of the study methodology and the type of evaluation in the selection of studies for presentation Scientific Events. **Methodology:** A prospective, observational, transversal study, applied in a cohort of studies submitted for presentation at BBCS 2021. This study does not require CEP evaluation by resolution 466/2012. All BBCS 2021 Evaluating Committee were invited to participate in the study. The studies were presented blindly to the evaluators, with 3 forms of evaluation being presented. The first criterion was based on 6 criteria (method, ethics, design, originality, promotion, social contribution), representing the pattern of the event. The second criterion, the evaluator considered a grade from 0 to 10 to the study. The third criterion was based on 5 criteria (presentation, method, originality, scientific and social contribution). The results were grouped and the studies classified. For evaluation of the correlation of the criteria of the items Cronbach alfa was performed. Factorial analysis was performed. For evaluation about the median differences between the tests we used Kruskal-Wallis and post hoc Dunn test. To evaluate the difference in the study classifications we used Friedman test and Namenyi's All-Pairs Comparisons. The "R" and IBM SPPS Statistics were used for analysis. **Results:** 122 studies were evaluated, of which 94 were original studies and 28 were case reports. Five professors performed all evaluations. Original studies had better scores. There was good correlation with the items of the criteria 1 (alfa=0.730) and 3 (alfa=0.937). The methodology and study design showed the main criteria need for studies evaluation. The Kruskal-Wallis showed differences in the results ($p<0.001$) of all criteria used [1-2 ($p<0.001$); 1-3 ($p<0.001$); 2-3 ($p=0.004$)]. Friedman test showed difference in the ranking of the studies ($p<0.001$), for all studies ($p<0.01$). **Conclusion:** Methodologies that use many criteria showed good correlation. Methodology and study design represent the main criteria. The methodology used in the evaluation of studies influences the ranking the best studies.

Keywords: breast; scientific society; methods; evaluation indexes

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CHARACTERIZATION OF CHRONIC PAIN IN WOMEN SUBMITTED TO BREAST CANCER TREATMENT

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Objective: To characterize chronic pain in women undergoing surgical treatment for breast cancer. **Methodology:** This is a cross-sectional, retrospective, hospital-based study. All breast cancer patients undergoing clinical follow-up at a referral hospital in central Brazil were screened. Women with chronic pain after surgical treatment of breast cancer, defined by the presence of pain after three months of surgery, were included in the study. The questionnaires were applied by the responsible researcher in the form of an interview, which took place in a dedicated office. The McGill Pain Questionnaire (BR – MPQ) and the Visual Analogue Scale (VAS) were used. **Results:** Ninety-nine patients were interviewed, of which 46 were included in the study. Most patients were between 50 and 59 years old (39.1%), were married (45.7%), were housewives (58.7%) and had completed high school (45.7%). Arterial hypertension was the most prevalent clinical comorbidity (41.3%), followed by diabetes mellitus (13.0%). Forty-five (97.8%) patients underwent sentinel lymph node biopsy, but 22 (47.8%) required axillary lymphadenectomy for some oncological reason. Thirty-five (76.0%) patients underwent chemotherapy (neoadjuvant or adjuvant) and 40 underwent radiotherapy (87.0%). According to the VAS, the mean pain intensity was 5.5 (±2.6). Most patients reported worsening pain with movement, with 26 (52.2%) "sometimes" and another 14 (30.4%) "always". In the McGill questionnaire, there was a predominance of the sensory domain among the characteristics of chronic pain. Relaxation techniques (52.2%), stretching (50.0%) and deep breathing (47.8%) were the most mentioned therapeutic measures. Drug treatment was reported by 21 (45.7%) women and acupuncture by only one. **Conclusion:** In the analyzed population, chronic pain was observed with moderate intensity and with predominance of sensitive characteristics according to the McGill pain questionnaire. The development of strategies for prevention, early diagnosis and multidisciplinary treatment can help reduce chronic pain in breast cancer survivors.

Keywords: Breast cancer, breast-conserving surgery, mastectomy, adjuvant radiotherapy, chronic pain.

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VALIDATION OF INDIAN MODEL FOR BREAST SELF EXAMINATION

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Objective: Breast Self Examination with help of a model can make learning to detect breast cancer in women easier.We evaluated this Indian Breast Self Examination model and interviewed 15 Health Care Workers. We report the feasibility of Indian Model in comparison to validated models. **Methodology:** We made an Indian model for breast self examination with tumour in the upper outer quadrant to suit Indian women needs .The model making procedure was through the following stages First designing of the model validation by experts Second making of the model validation by experts.Validation was done by Breast surgeons, Medical oncologist ,Radiation oncologist and Model designer. Interviews were conducted by an Endocrine and Breast surgeon after explaining a validated model and then introducing the newly designed Indian model. **Results:** Results: Parameter value Have you used any simulation model before 12/15 (80%) Do you think it would help in teaching women how to detect breast cancer during breast self examination 15/15 (100%) In comparison to the first model how would you rate the Indian model(0 – 100) 91.33±4.98 **Discussion:** BSE requires help of a breast model so that normal women can learn to detect breast cancer as early as possible We made the model in the following lines easy to get things Cheap durable Technically realistic safe easy to reproduce Model from Germany and England were costing Rs. 1,50,000/- and Rs. 10,0000/- when compared with Indian Model costing Rs. 1500/- only. **Conclusion**: Indian Breast self examination model can be used in our setting for women to learn early detection of breast cancer .It is easily reproducible

Keywords: Breast self examination,breast cancer

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SCREENING MAMMOGRAPHY BEFORE AND DURING THE COVID-19 PANDEMICS IN BRAZIL: AN ANALYSIS FROM PUBLIC REGISTRIES

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Objective: The goal of this study was to evaluate the impact of the COVID-19 pandemic on breast cancer screening in the public health system in Brazil. The Brazilian Ministry of Health recommends mammography screening every two years from 50 to 69 years of age. **Methodology:** This is a cross-sectional study based on data from the Brazilian Institute of Geography and Statistics (IBGE), and from the System of Health Information of the public health system (DATASUS). We evaluated the absolute number of screening mammograms performed per age group every year from 2017 to 2021. The year of 2017 was considered the reference. **Results:** In 2017, a total of 2,616,022 screening mammograms were performed through the Brazilian public health system in women 50 to 69 years of age, in comparison to 1,456,001 (44.34% fewer) in 2020 and 1,998,097 (23.62% fewer) in 2021.The expected number of exams, considering the target population in 2021, would be of 8.5 million. Also, in 2018 there were 3.8% and in 2019, 5,4% fewer exams than in 2017. Of note, the target population increased by 10% from 2017 to 2021. Regarding other age groups, the proportion of mammograms performed remained similar over the period: 65% of the exams are performed in the recommended range, 29.5% between 35 and 49 years and 5.5% in patients older than 70 years **Conclusion:** There was a large (44.34%) decrease in the number of screening mammograms in 2020 in comparison to 2017. However, in years before the pandemics (2018 and 2019), the proportion of women who underwent screening was also smaller than in 2017. More studies are needed to evaluate social and political factors associated with the low proportion of screening mammograms and yearly fluctuations in breast cancer screening through the public health system in Brazil.

Keywords: Breast cancer, Screening mammography, COVID-19, Brazil, Quality indicators in health care

EVALUATION OF MALIGNANCY UNDERESTIMATION IN BREAST PAPILLARY LESIONS DIAGNOSED AT PERCUTANEOUS BIOPSY IN A SOUTH BRAZILIAN ANATOMOPATHOLOGICAL LABORATORY CENTER

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Objective: Discover the percentage of patients who underwent surgery due to a biopsy with a diagnosis of papillary lesion and who had their diagnosis underestimated for cancer, analyzing the biopsy data and comparing with the post-surgical results in the last 10 years. **Methodology:** Anatomopathological exams of percutaneous core-type or vacuum breast biopsy between 2010 and 2020 with a result of papillary lesion were analyzed and compared with the anatomopathological result obtained surgically. Cases in which the biopsy already demonstrates malignancy were excluded. The data were from the CEDAP (Centro de Diagnósticos Anátomo-Patológicos) pathological anatomy laboratory database in Joinville, Santa Catarina. **Results:** In the reported period, 126 biopsies were recorded with a diagnosis of breast papillary lesion. Of these, 21 were excluded because they did not meet the established criteria. In the follow-up exams of the papillary lesions after surgery, 76 (72.4%) corresponded to benign lesions, including 30 cases demonstrating atypia, and 29 (27.6%) to carcinomas, of which 14 corresponded to invasive lesions and 15 “in situ” carcinoma. **Conclusion:** Papillary breast lesions are a diagnostic challenge in biopsy, requiring sequential surgical excision, even though this practice is being questioned nowadays, due to the high risk of underestimation.

Keywords: breast, papillary, malignant, needlebiopsy

ACCESS TO BREAST CANCER TREATMENT ASSOCIATED WITH SOCIODEMOGRAPHIC AND LIFESTYLE CHARACTERISTICS

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Objective: There is evidence in the literature that patients from the Public System who enter the hospital seeking treatment for breast cancer differ from those from the Supplementary Health System. An investigation of the association of access to treatment - public or supplementary - of invasive breast cancer with sociodemographic characteristics and lifestyle becomes important in view of the scarcity of research in mixed populations such as the Brazilian one. **Methodology:** Thus, this cross-sectional study performed the association of the form of access to treatment for invasive breast cancer with sociodemographic characteristics and lifestyle in 583 patients seen in a cancer center in southeastern Brazil. Pearson's chi-square test or Fisher's exact test was used for statistical analysis. **Results:** Thus, this cross-sectional study performed the association of the form of access to treatment for invasive breast cancer with sociodemographic characteristics and lifestyle in 583 patients seen in a cancer center in southeastern Brazil. Pearson's chi-square test or Fisher's exact test was used for statistical analysis. The average age of this research was 52.3 years. We found an association of access to treatment with a higher proportion of women 50 years or older in the Public System ($p=0.008$); the Public System showed a higher frequency of women with marital cohabitation ($p<0.001$); supplementary health had higher education ($p<0.001$); there was a higher frequency of white women in Supplementary Health ($p<0.001$); higher frequency of smokers and former smokers in the Public System ($p=0.003$); higher frequency of alcohol consumption currently and in the past in Supplementary Health ($p=0.008$); First mammogram performed before 40 years in the Public System ($p<0.001$); greater agility in performing the last mammogram in the Supplementary System ($p<0.001$); Higher frequency of family history of breast cancer in the Public System ($p<0.001$); higher proportion of women with 3 children or more in the Public System ($p<0.001$). **Conclusion:** This research identified that patients treated by the Public System present greater social vulnerability when compared to women in the Supplementary System.

Keywords: Breast Cancer, Access to treatment, Sociodemographic characteristics

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PALLIATIVE CARE: A MULTIPROFESSIONAL APPROACH IN PATIENTS WITH BREAST CANCER

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Objective: To describe the importance of the multidisciplinary team in the management of pain in patients with breast cancer under palliative care. **Methodology:** This is a qualitative literature review, based on the analysis of studies available in the databases "Scielo", "Pubmed" and Google Scholar platform. Aspects such as the particular needs of different patients, the views and participation of the various health professionals involved in the treatment, as well as the patients' family network and affinities and their perceptions of the benefit of such an approach were taken into consideration. The descriptors used were the terms "Palliative Care", "Breast Cancer" and "Multidisciplinary Team". Studies published between 2018 and 2022 and available in Portuguese or English were selected. **Results:** Among the materials analyzed, it is evident that, palliative care for breast cancer should include a multiprofessional team, which aims to meet most of the individual's needs. In addition, it can be observed that the insertion of this approach in the treatment of the patient improves adherence, awareness about the disease, thus interfering in the improvement of physical and psychosocial symptoms, resulting in an improvement in the quality of life of the patient. However, the lack of knowledge of patients and families about palliative care causes late and unplanned referral. **Conclusion:** It is found that breast cancer is a multifaceted disease that covers several dimensions that make up the biopsychosocial being. Consequently, the care must be prepared by a multidisciplinary team in order to improve adherence to treatment and education about the disease and, finally, care for the patient in its entirety, reducing their suffering.

Keywords: Breast Cancer, Palliative Care, Multiprofessional Team

IS THERE ANY DIFFERENCE IN LOCORREGIONAL RECURRENCES AFTER CONSERVING BREAST SURGERY IN PATIENTS OVER 70 YEARS OLD COMPARED WITH PATIENT BELOW?

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Objective: The aim of the study was to assess whether the type of surgical treatment has an impact on local recurrence and overall survival (OS) of patients aged 70 years or older when compared to patients under 70 years of age. **Methodology:** This is a retrospective case-control study. Data were collected from the medical records of all female patients undergoing surgical treatment for breast cancer at the Hospital do Servidor Público Estadual de São Paulo (HSPE) between March/2014 and October/2020. Female patients with a diagnosis of malignant neoplasm of the breast confirmed by the pathological anatomy exam and submitted to surgical treatment at some stage of the follow-up (1120 patients) were included in the present study. Patients whose medical records did not present complete data (37) and the presence of metastasis at diagnosis (6) were excluded. The final sample contained 1077 patients. For continuous variables, mean and standard deviation were calculated; for categorical variables, frequency and percentage were calculated. To compare the variables of interest by age group, the chi-square test was used. When necessary, Fisher's Exact test or the Likelihood Ratio test were used. To compare Overall Survival, Relapse-Free Survival and Metastasis-Free Survival by age group, Log Rank (Mantel-Cox) was used, when necessary, the Breslow test was used. The curves were fitted by Kaplan-Meier. A significance level of 5% was used (p-value < 0.05). **Results:** Local recurrences occurred in 61 patients (5.7%) with a mean time of 24 months after diagnosis and 120 (11.2%) patients had distant metastasis at a mean of 23 months. There were 96 deaths (8.9%), of which 73 were from neoplastic causes (78.5%) on average 30 months after diagnosis. The mean follow-up time was 47 months, the SG was 45 months and the SLD was 43 months. Patients were divided into groups aged up to 69 years (G1) and 70 years or older (G2). G1 was composed of 808 patients (75%) and G2, of 269 (25%). The comparative analysis of the groups showed a statistically significant difference in specific clinical stages: G1 had more EC IIIA and G2, IIA and IIIB. There was no statistically significant difference in Estrogen Receptor, Progesterone Receptor and HER2 positivity; however, G1 had a higher Ki67 mean ($p<0.05$). There was a statistically significant difference in the indication of breast CC with patients from G1 being more frequently submitted to this type of treatment. There was no significant difference in the variables of RL, metastasis and their respective times. Among the patients who underwent breast-conserving surgery, there was no statistically significant difference in LR and metastasis, however, the patients in G1 who underwent breast-conserving surgery relapsed in a shorter time than those in G2: 28 x 39 months - $p< 0.05$. There was no difference between the groups regarding DFS, however, the overall survival was higher among patients in G1 ($p<0.05$)

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Conclusion: The present study presented data that showed no statistically significant difference in locoregional recurrence rates between patients under 70 years of age and patients aged 70 years and over. Those, however, had higher overall survival.

Keywords: breast cancer, local recurrences, eldery

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ANALYSIS OF THE R337H VARIANT IN THE TP53 GENE IN A GROUP OF PREMENOPAUSAL WOMEN WITH BREAST CANCER FROM THE CENTRAL-WESTERN REGION OF BRAZIL: A PILOT STUDY

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Objective: The aim of this study was to investigate the frequency of the R337H variant in the TP53 gene in a group of premenopausal women with breast cancer from the Central-Western of Brazil and its possible associations with clinical, pathological and prognostic aspects. **Methodology:** The research comprised a pilot study of 36 patients with breast carcinomas diagnosed before the age of 50, selected from the records of the Laboratory of Immunohistochemistry, Department of Pathology, Hospital Araújo Jorge, in Goiânia (GO). DNA extraction was performed with QIAamp DNA FFPE Advanced (Qiagen, Germany) and the R337H variant was investigates in 36 patients using the PCR-RFLP method. **Results:** Among 36 samples of breast cancer diagnosed in premenopausal women, three were positive for the R337H variant in the TP53 gene (8.3%). Furthermore, all three patients presented a very diverse phenotypic heterogeneity. **Conclusion:** We concluded that carriers of the R337H variant are no longer limited to the South and Southwestern region of Brazil and might be further investigated in a larger population of pre-menopausal breast cancer patients from the Central-Western region of Brazil.

Keywords: breast cancer, prognosis, pre-menopausal, germline mutation, TP53 gene

APPROVED PAPERS FOR POSTER

ANALYSIS OF TUMOR RESPONSE IN THE BREAST AND AXILLA ACCORDING TO MOLECULAR SUBTYPE IN BREAST CANCER PATIENTS SUBMITTED TO NEOADJUVANT CHEMOTHERAPY

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Objective: Objectives: Pathological complete response rate (pCR), ypT0/ is ypN0, after neoadjuvant chemotherapy (NAC) varies in each molecular subtype of breast cancer, being lower in hormone receptor positive (HR+) tumors. Objective of this study is to analyze the pathological response rate (PR) only in the breast, only in the axilla or the pCR, correlating with the molecular subtypes. **Methodology:** Methodology: Retrospective observational study of stage II and III patients undergoing NAC between 2013 and 2020 at the Oncology and Mastology Service of Santa Casa de Misericórdia de Belo Horizonte – MG (SCMBH). Approved by the Research Ethics Committee of SCMBH with the number 3,787,212 complying with Resolution 196/96 of the National Council for Ethics in Research. **Results:** Results: 209 patients were selected, with a mean age of 50.6 years; 22.0% were T2, 35.9% were T3 and 42.1% were T4; 17.2% were pre NAC cN0 and 82.7% were cN+. Patients were divided into Group A, RH+, with 147 patients (70.3%) and Group B, HER2+ and TN, with 62 patients (29.7%). When comparing PR only in the breast, RH+ patients had a better result (4.8% versus 1.6%). As well as PR only in the axilla, 37.4% against 29.0%. When subdividing group A into RH+/HER2- and RH+/HER2+, the former presented better results in the breast (4.3% X 0%) and in the axilla (60.9% X 55.6%). **Conclusion:** Conclusion: Achieving pCR is not the only goal with NAC. Other benefits include the possibility of breast and axilla conserving surgery. The study demonstrated good PR results in both the breast and the axilla in Group A and in the RH+/HER2- subgroup. These responses allow for a less morbid surgical treatment, both aesthetically and because of the risk of lymphedema. The data presented provide a compelling rationale for the use of NAC in a molecular subtype considered to be relatively resistant to chemotherapy.

Keywords: Breast carcer, neoadjuvant chemotherapy, hormone receptor positive tumor.

MAMMOGRAPHIC SCREENING COVERAGE IN ELDERLY WOMEN IN BRAZIL

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Objective: To assess trends in breast cancer screening in the Unified Health System (SUS) in women over 70 years of age, during 2010-2021, and to assess the frequency of malignant lesions in this group, from 2014-2021. **Methodology:** This is an ecological study on breast cancer screening in elderly women, in the SUS, in Brazil, from 2010-2021. Data were extracted from the Outpatient Information System of the SUS Informatics Department and the Cancer Information System. Coverage was calculated from the ratio between the number of mammograms performed and the number expected for the population at risk. **Results:** We observed that in Brazil there was an average mammographic coverage of 6.7% in this age group. The South Region had the highest coverage with an average of 8.9% for the period, while the North Region had the lowest rate of 3.1%. Among the states, São Paulo and Paraná, with 9.9% and 9.6% respectively, had the highest rates. There was a reduction in the coverage rate in the analyzed period, more pronounced in 2020-2021 due to the Covid-19 pandemic, caused by the reduction in the active demand of women for health treatment in this context. The number of exams with a diagnosis of malignant lesion followed a pattern and increased until 2019, followed by a decrease in 2020, due to Covid-19 and an increasing trend in 2021. The total number of exams in the analyzed period was 13,090, an increase of 1,604% compared to 2014. The states that most show participation in these results were São Paulo 16%, Minas Gerais 16%, Paraná 14% and Pernambuco 13%. **Conclusion:** The number of breast cancer cases in elderly women has increased, but screening has not followed this trend. It is necessary to rethink assistance to this age group, discussing public health measures that address this reality.

Keywords: breast cancer; elderly women; screening programs; mammography; healthcare coverage; National Health Service

APPROVED PAPERS FOR POSTER

ASSESSMENT OF WEIGHT AND ITS RELATIONSHIP WITH BREAST CANCER IN A CLINICAL ONCOLOGY SERVICE IN THE FEDERAL DISTRICT

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Objective: The purpose of this study was to analyze the relationship between obesity and clinical outcomes in breast cancer patients by evaluating the mean body mass index (BMI) and overall survival. **Methodology:** This was a retrospective observational and descriptive study without intervention, carried out in a public oncology service in the Federal District. We selected breast cancer patients with hormonal expression positivity in follow-up from January 2016 to December 2020. **Results:** 305 female patients were evaluated, aged between 33 and 92 years with a median age of 59 years. Most patients were over 55 years of age (63.3%). The mean weight of the patients was 71.70±9.10 kilograms. Regarding BMI, 38.7% of patients were classified as obese. As for the immunohistochemical classification (IHC), 72.9% of the patients were Luminal B. Among the patients in which the initial treatment was registered, 56.1% received hormone therapy, while 43.9% received chemotherapy. The intention to treat in most patients was curative. Most patients had disease staging between II and III. As for the outcome, most patients were still undergoing treatment (83.0%) at the time of data collection. Correlating the IHC classification with patient survival, there was no significant difference between patients classified as luminal A and those classified as luminal B (p: 0.342). There was also no significant difference between non-obese and obese patients in the assessment of overall survival and weight (p: 0.917). **Conclusion:** Despite the high prevalence of obesity in the studied population, the overall survival of this group did not differ from the non-obese group, even in the analyzes by IHC profile.

Keywords: breast cancer; body mass index; survival

IMMUNOPHENOTYPING OF BREAST CANCER ASSOCIATED WITH MALIGNANT TUMOR CLASSIFICATION AND HISTOPATHOLOGICAL FEATURES

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Objective: The immunohistochemical profile of breast cancer is based on the evaluation of estrogen and progesterone receptors, HER2 expression and cell proliferation index. An investigation of the association of immunophenotyping with the classification of tumors and the description of their anatomical extent becomes important in view of the scarcity of research in mixed populations such as the Brazilian. Thus, this research performed the association of immunophenotyping - Luminal A, Luminal B HER2 negative, Luminal B HER2 positive, HER2 positive and Triple negative - with the classification of malignant tumors and histopathological characteristics in patients with breast cancer seen in a cancer center in southeastern Brazil. **Methodology:** This is a cross-sectional study with 583 female patients with invasive breast cancer in which Pearson's chi-square test or Fisher's exact test was used for statistical analysis. **Results:** There was a higher frequency of women with the luminal B HER2 negative subtype (33.9%). Analysis of immunophenotyping with clinical characteristics found a higher frequency of clinical stage I in Luminal A, 40% ($p<0.001$); pathological stage I in Luminal A, 45% ($p<0.001$); invasive ductal carcinoma morphology in HER2 positive, 97.4% ($p<0.001$); histological grade G3 in triple negative, 66.3% ($p<0.001$); nuclear grade 3 in HER2 positive, 87.2% ($p<0.001$); and e-cadherin positive in HER2 positive Luminal B, 81.8% ($p<0.001$). **Conclusion:** There was a significant rate of pathological primary tumor T0 in the triple negative (21.7%), which highlights the advance of therapy in this subtype hitherto known to be of worse prognosis. Contrary to expectations, the molecular subtype that showed the most metastasis was Luminal B positive (10.8%). We observed that in the population analyzed the immunophenotyping showed an association with clinical and histopathological characteristics. The more severe molecular subtypes presented a more advanced stage.

Keywords: Breast Cancer, Tumor Biomarkers, Molecular Biology

APPROVED PAPERS FOR POSTER

THE INFLUENCE OF PHYSICAL EXERCISE AS INTEGRATIVE, COMPLEMENTARY PRACTICE ON PATIENTS WITH BREAST CANCER DIAGNOSTIC: A LITERATURE REVIEW

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Objective: The influence of physical exercise as Integrative and Complementary practice on patients with breast cancer diagnosis: a literature review. Objective: To evaluate the influence of physical exercise as an alternative to integrative and complementary practices and its importance in patients diagnosed with breast cancer. **Methodology:** This is a literature review, which was carried out in the Pubmed and Scielo databases, in which the articles were searched using the terms: breast cancer, physical exercise, quality of life, non-pharmacological treatment as a search engine. Selected between the period 2017 to 2022. The type of study selected for research were experimental and observational. **Results:** A study carried out with 28 patients was divided into an experimental group (combined and hospital treatment) and a control group (hospital treatment), where it was concluded that the combined treatment (aerobic, resistance and flexibility exercise) led to an increase in the frequency of physical activity. physical exercise in patients with breast cancer, which may provide better cardiorespiratory and joint control (Coelho, Rafael dos Santos, et al.). In another study that was carried out with 10 women who survived breast cancer, for four months, with the practice of combined physical exercises, it was evidenced that remotely supervised non-face-to-face aerobic and resistance exercises can help to maintain the level of fatigue of positively (Pinto, Stephanie Santana, et al.). These results corroborate the perception of professionals from the Family Health Strategy, who observed the positive effects of PICS through the suffering and fragility in the treatment of women with breast cancer, acting on an emotional and spiritual improvement for them, which makes these practices relevant. adjunct to conventional treatment in primary care (Lima, Janaine Gonçalves, et al). **Conclusion:** Physical exercise as an integrative practice can improve asthenia, assist in cardiorespiratory and joint control and in the management of fatigue. Therefore, PICS provide emotional, physical and spiritual benefits for patients diagnosed with breast cancer.

Keywords: Breast cancer, physical exercise, quality of life, complementary integrative practices (PICS).

MACROSCOPIC EVALUATION OF THE PATHOLOGICAL MARGIN IN PATIENTS WITH BREAST CANCER DURING BREAST-CONSERVING SURGERY

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Objective: Nearly 1/5 of women with breast cancer (BC) treated by breast-conserving surgery (BCS) require re-operation due to positive margins to final pathology. In our hospital practice, intraoperative macroscopic pathological margin evaluation (IMPE) of all lumpectomy specimens is routine. The objectives of the study were to assess the accuracy of the IMPME in a large study population of BC patients treated by BCS. **Methodology:** Patients treated by BCS from 2015 to 2017, for invasive BC were included in a retrospective analysis. The diagnostic accuracy of IMPME in predicting margin involvement was calculated by determining its sensitivity (Se), specificity (Sp), negative predictive value (NPV), and false negative rate (FNR). **Results:** Five hundred and forty-three women with 562 BCS were analyzed. There were 30 (5.5%) patients with multiple BC tumors and 17 (3.1%) patients with bilateral BC. Among them, 460 (81.7%) were invasive ductal carcinomas (IDC) and 79 (14%) invasive lobular carcinomas (ILC). According to intrinsic subtype classification, 504 (89.7%) were luminal tumors, 44 (7.8%) were triple negative tumors and 14 (2.7%) were HER2-enriched breast tumors. The mean pathological tumor size was 12.2 mm (range: 1.5–40 mm). With a cut off ≤ 1 mm for positive margin status with IMPME, the Se, Sp, NPV and FNR were 65.9% (29/44), 66% (342/518), 95.8% (342/ 357) and 4% (15/357) respectively. There were 34.2% (192/562) BCS with intraoperative re-excision after IMPME examination. The secondary re-excision rate for final positive margins after BCS was 6.6% (37/562) **Conclusion:** In this study population, IMPME is not sensitive and specific enough to discriminate between negative and positive margins during BCS. Nevertheless, its NPV seems sufficiently accurate to exclude the presence of residual breast tumor tissue on the surgical specimen of patients treated with BCS, which represents an effective technique for evaluating the intraoperative margin in BC patients.

Keywords: margin evaluation, macroscopic pathological examination, breast-conserving surgery

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SYSTEMIC TREATMENT FOR EARLY-STAGE TRIPLE NEGATIVE BREAST CANCER: A RECOMMENDATION FROM AN EXPERT PANEL OF THE BRAZILIAN SOCIETY OF MASTOLOGY

29

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Objective: Objectives: to assess the knowledge and attitudes of members of the Brazilian Society of Mastology (SBM) about the systemic treatment of TNBC. **Methodology:** Methods: All 1,400 SBM members were invited to answer a survey with 44 objective questions. An expert meeting was held in December 2021, with the participation of 27 experts and three ad hoc consultants. Panelists responded to the survey before and after the meeting (brainstorm). Responses that reached 70% agreement were considered consensual. **Results:** Results: There was consensus regarding the indications for neoadjuvant chemotherapy and the addition of platinum in this context; unlike immunotherapy, which was only recommended among experts after brainstorming. The presence of germline BRCA mutations does not interfere with the recommendation of neoadjuvant treatment with immunotherapy (double consensus). On the other hand, 70.6% of mastologists consider the status of PD-L1 for the indication of neoadjuvant immunotherapy. Faced with the combination of chemotherapy and neoadjuvant immunotherapy, about 75% of respondents recommend that anthracyclines be used in a dose-dense regimen (double consensus). After the brainstorm, this agreement was reversed. In adjuvant therapy, controversies remain regarding the maintenance of immunotherapy; and the combination of immunotherapy and capecitabine/olaparib in relevant cases. **Conclusion:** Conclusion: Consensus among experts was reached in more than 70% of the questions and agreement between panelists and associates was moderate. As verified in the brainstorm, the educational intervention about the systemic treatment of breast cancer influenced the mastologist's decision making in 60% of the questions. This theme should be explored, intensively and systematically, in continuing education actions aimed at mastologist professionals.

Keywords: Breast Neoplasms; Triple Negative Breast Neoplasms; Consensus Development Conferences as Topic.

EVALUATION OF THE CLINICAL PARAMETERS OF A GROUP OF PATIENTS WITH TRIPLE NEGATIVE BREAST TUMORS

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Objective: To evaluate the prevalence of triple negative breast cancer (TNBC) in breast cancer patients treated at the Mastology service of the Hospital das Clínicas - Federal University of Minas Gerais (HC-UFMG/EBSERH) and to analyze other clinical parameters in this population, such as age, clinical stage at first consultation and family history (FH) for cancer. To describe the systemic treatment, the surgical approach used and the pattern of response after neoadjuvant chemotherapy . **Methodology:** A retrospective cohort study was carried out with the analysis of 337 patients treated at the Mastology service of HC-UFMG with TNBC. The study was approved by the National and Institutional Research Ethics Committee. **Results:** Of the 337 patients analyzed, 45 (13.35%) had TNBC. The median age of the patients was 51 years, the minimum age was 24 and the maximum age was 77 years. Clinical staging at first consultation corresponded mostly to stage IIIA (46%) followed by 15% in stage IA and 12% in stage IIB. The positive FH for cancer in a first-degree relative was 52%. In addition to mastectomy, performed in 50% of patients, axillary lymphadenectomy was added in 70% of cases and sentinel lymph node biopsy in the remaining 30%. Of the patients who underwent conservative treatment, 50% underwent axillary lymphadenectomy and 50% underwent sentinel lymph node biopsy. Only 5% did not undergo chemotherapy (early stages). Fifty-nine percent underwent neoadjuvant chemotherapy, fulfilling the indication criteria authorized by the SUS. Pathological complete response was achieved in 32% of patients. **Conclusion:** The incidences found in the population with TNBC assisted by the mastology service of the HC-UFMG are similar to those found in the world population. The 45 (13.35%) patients in the study with TBNC are mostly (58%) of advanced clinical stage and with positive FH (52%).

Keywords: breast cancer; triple negative; epidemiology; treatment

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CLINICOPATHOLOGIC FEATURES ASSOCIATED WITH THE PROGNOSIS OF YOUNG WOMEN WITH BREAST CANCER IN BRAZIL

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Objective: The aim of this study was to investigate clinical-pathological features and the prognosis of premenopausal breast cancer patients, stratified by three age groups (below 33 years, 34-36 years and 37-49 years). **Methodology:** This is a retrospective study including 206 patients with breast carcinomas diagnosed before the age of 50 years old, selected from the records of the Laboratory of Immunohistochemistry, Department of Pathology, Hospital Araújo Jorge, in Goiânia (GO). **Results:** Patients age at diagnosis ranged from 21 to 49 years and the mean age was 34 years (± 4.3). Five-year overall survival for the group was 61.8%. Younger patients, diagnosed before 32 years old, presented a worse prognosis (52.3%), compared to other age groups (p = 0.049). Younger patients also presented a higher percentage of T4 tumors (33.3%) (p = 0.045) and advanced stage of the disease (III-IV) (79.1%) (p = 0.007). **Conclusion:** We concluded that the clinicopathological and immunohistochemical characteristics of the patients diagnosed with breast cancer before the age of 50 years were associated with low overall survival. In addition, patients diagnosed before 32 years of age presented with more aggressive tumor characteristics and worse prognosis when compared to other age groups.

Keywords: breast cancer, prognosis, pre-menopausal, young, Brazil

CONDUCTING BREAST CANCER RESEARCH DURING A PANDEMIC ISOLATION TIME

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Objective: Aiming the assistance of women with breast cancer, quality of life indicators can help in clinical practice, guide therapeutic intervention strategies, evaluate the success of intervention after surgery and cancer treatment, in addition to defining parameters for actions. In this perspective, we started a study about the quality of life of patients treated for breast cancer at the Institution. However, as soon as the Pandemic started, emerged the need to readapt the way of filling out the questionnaires to an online model. Our objective is to share the facilities and difficulties of online model research. **Methodology:** Through the selection of patients for research that aimed to analyze the quality of life of patients with breast cancer, they were contacted by their registered e-mails in the Institution system. Each patient received an explanation of the project through e-mail and the Free and Informed Consent Term (TCLE). After agreement, the survey link of the REDCap system directing the selected instrument to be filled was sent. The analysis included a general Questionnaire composed by demographic and clinical aspects (collected by electronic medical record data) and specific questionnaires. **Results:** 477 emails were sent, 52 patients signed the TCLE (but 2 did not answer the research), 36 answered the questionnaires completely and 14 incompletely. 12 emails returned (wrong e-mail address). **Conclusion:** In the pandemic period, new tools were incorporated in order to obtaining data and maintain research. Moving to an online way brought the chance to keep studies, giving new possibilities to answer a research remotely, but difficulties were added to this new kind of research. E-mail data, lack of explanation face to face, and number of complete responses mainly in long questionnaires were some of the most tricky part of this new way of study. Online strategy is a real option, but the successful of the process depends on many variables.

Keywords: quality of life, online research, questionnaire, e-mail

APPROVED PAPERS FOR POSTER

ACCESS TO BREAST CANCER TREATMENT ASSOCIATED WITH MALIGNANT TUMOR CLASSIFICATION AND HISTOPATHOLOGICAL CHARACTERISTICS

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Objective: There are differences between patients from the Public System and those from Supplementary Health Care seeking treatment for breast cancer. An investigation of the association of the form of access to treatment for invasive breast cancer with the classification of malignant tumors and histopathological characteristics becomes important in view of the scarcity of research in mixed populations such as the Brazilian. **Methodology:** Thus, this cross-sectional study performed the association of the form of access to treatment for invasive breast cancer with the classification of malignant tumors and histopathological characteristics in 583 patients seen in a cancer center in southeastern Brazil. Pearson's chi-square test or Fisher's exact test was used for statistical analysis. **Results:** This analysis found an association between the form of access to treatment and morphology, in which invasive ductal carcinoma was more frequent in the public system (p=0.024). We found no association with the variables clinical stage (p=0.880); pathological stage (p=0.585); histological grade (p=0.948); nuclear grade (p=0.395); estrogen (p=0.749); progesterone (p=0.943); HER2 (p=0.266); Ki-67 (p=0.550) and molecular subtype (p=0.686). **Conclusion:** In this research, access to treatment showed no association when crossed with clinical and histopathological characteristics of breast cancer.

Keywords: Breast Cancer, Tumor Biomarkers, Molecular Biology

IS YOUNG BREAST CANCER BIOLOGICALLY DIFFERENT AND AGGRESSIVE? - A RETROSPECTIVE COMPARATIVE STUDY

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Objective: Young breast cancer (YBC) is known to be aggressive. There is no enough data comparing the aggressiveness of YBC in India. So, we did a comparative study between YBC and non-YBC. Details related to clinical stage, treatment patterns and relapse rates were analyzed. **Methodology:** This study is a retrospective analysis from the comprehensive data base from the Surgical Oncology Department in a tertiary care centre, India. Patients younger than 40years were compared with more than 40years. Patients with relevant information unavailable were excluded. **Results:** Total number of patients analyzed were 3544. Among them,949(26.77%) were <40years and 2595(73.22%) were >40years. Among 949 patients,6.85% presented with stage I disease, stage II(35%), stage III(50.47%) and stage IV(7.69%). Among 2595 patients,8.13% in stage I, stage II(36.91%), stage III(49.24%) and stage IV(5.7%). Clinical stage on presentation were comparable in both the groups. In YBC,61.32% were node positive and 39.51% were node negative. In non-YBC,59.49% were node positive and 40.50% were node negative. Node positivity rates were similar in both the groups. When molecular subtypes were analyzed, in <40years, 33.82% in luminal A,14.43% in luminal B, 33.30% in TNBC and 18.44% in Her-2neu enriched. In >40 years, 35.30% in luminal A, 19.38% in luminal B, 23.54% in TNBC, 21.77% in Her-2neu enriched. In YBC, patients with TNBC molecular subtypes were higher. Breast Conservation Surgery (BCS) were more in YBC (31.29%) when compared to >40years(22.31%).Neoadjuvant Chemotherapy (NACT) given were higher in YBC (38.14%) compared to >40 years(27.05%). Post-operative radiotherapy (PORT) given were similar in both groups, YBC (63.96%) and non-YBC(60.38%). Relapse rates were higher in YBC (22.23%) compared to >40years(15.52%). **Conclusion:** Results of our study indicates clinical stage at presentation were comparable in both the groups however YBC patients had more BCS rates, NACT rates, aggressive molecular subtypes(TNBC) and higher relapse rates. This needs further research and detailed analysis.

Keywords: Young breast cancer, BCS, NACT, Relapse, Clinical stage, India

APPROVED PAPERS FOR POSTER

LOCOREGIONAL TREATMENT FOR EARLY-STAGE TRIPLE NEGATIVE BREAST CANCER: A RECOMMENDATION FROM AN EXPERT PANEL OF THE BRAZILIAN SOCIETY OF MASTOLOGY

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Objective: to evaluate the knowledge and attitudes of the members of the Brazilian Society of Mastology (SBM) about the locoregional treatment of triple negative breast cancer (TNBC). **Methodology:** All 1,400 SBM members were invited to answer a survey with 44 objective questions. An expert meeting was held in December 2021, with the participation of 27 experts and three ad hoc consultants. Panelists responded to the survey before and after the meeting (brainstorm). Responses that reached 70% agreement were considered consensual. **Results:** In a patient undergoing conservative surgery after neoadjuvant therapy, with compromised sentinel lymph node (SLNB), there was a double consensus on the indication of lymphadenectomy (ALND). In patients undergoing upfront surgery, with compromised SLNB, there was a double consensus on the indication of radiotherapy for locoregional control. However, 22% of breast specialists still indicate ALND in patients eligible for the ACOSOG Z0011 study. In women with TNBC who tested negative for pathogenic mutations, 100% of the panelists disagreed with the unrestricted indication of bilateral mastectomy. In women with a positive test, almost 100% of the respondents stated that the possibility of bilateral mastectomy should be considered. The panel reaffirmed the concept of "no ink on tumor" as adequate margins, regardless of initial treatment. **Conclusion:** Consensus among experts was reached in more than 70% of the questions and agreement between panelists and associates was moderate. In view of the differences observed in some points already consolidated in the literature, it is suggested that the locoregional treatment of TNBC be explored, in an intense and systematic way, in continuing education actions aimed at the mastologist.

Keywords: Breast Neoplasms; Triple Negative Breast Neoplasms; Consensus Development Conferences as Topic.

SELF-PERCEPTION OF HAPPINESS IN WOMEN WITH BREAST CANCER

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Objective: To establish correlations between well-being and breast cancer-related aspects. **Methodology:** Women with breast cancer (BC) diagnosis (n=42) were interviewed and National Gross Happiness (NGH) was assessed through an adaptation of The Second Gross National Happiness Survey Questionnaire. Cancer-related data were also assessed, such as staging, anatomopathological results, hormonal status, and surgical modality. **Results:** The mean age during BC diagnosis was 43.8 years. The overall happiness self-perception (HSP) score found was 8.8 out of 10. Unhappy feelings or deprived humor were reported by 61.8% of the interviewed women. Good Doctor-Patient relationship (DPR) during treatment was reported by 92.3% of the study population, and those who reported it had higher overall HSP scores in comparison with those who reported problems regarding their DPR. Besides, 97.6% of the interviewed women had surgical treatment, and our data showed no significant changes in the overall HSP scores among patients undergoing mastectomy and lumpectomy. **Conclusion:** Women with breast cancer are prone to experience unhappiness and have deprived humor, in spite of having high overall HSP scores. Besides, in opposition to our original thoughts, the modality of surgical treatment did not have a significant impact on HSP scores.

Keywords: breast cancer; happiness; mastectomy; lumpectomy.

BREAST RECONSTRUCTION WITH AND WITHOUT ADJUVANT RADIOTHERAPY: A CRITICAL REVIEW

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Objective: Breast cancer is the most common malignancy in women worldwide. After mastectomy many women wish to reconstruct the affected breast and immediate breast reconstruction has proven to be oncologically safe in relation to just mastectomy. In addition, indications for post-mastectomy radiotherapy sessions are becoming more frequent, due to their relationship with reduced mortality and locoregional recurrence. For this reason, many women who opted for immediate reconstruction underwent radiotherapy with implants or expanders. To compare the outcome of patients with breast cancer undergoing adjuvant radiotherapy after breast reconstruction surgery with an implant or expander, with patients who did not need irradiation. **Methodology:** Literature review carried out on the CAPES Journal Portal. **Results:** The studies are unanimous when it comes to the increased risk of complications between the control groups and patients who have undergone PMRT. The reconstructive failure rates are lower and the aesthetic results were better in surgeries with implants, when compared with tissue expanders. Autologous surgeries are apparently safe and should be considered in the context of the PMRT. **Conclusion:** This review did not find sufficient scientific evidence to determine the best technique and the best period for radiotherapy in PMRT indications. It is concluded that the choice of the operative technique and the time of radiotherapy must be at the discretion of the surgeon and multidisciplinary team of each service, always in a shared decision with the patient.

Keywords: Breast cancer; Mammaplasty; Breast implants; Radiotherapy, Adjuvant; Autologous flaps.

PREVALENCE STUDY OF CLINICAL INDICATIONS FOR BREAST MRI

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Objective: Cross-sectional study of the clinical indications, and prevalence for breast magnetic resonance scan. **Methodology:** Data were collected retrospectively from women who had breast MRI performed at Clínica São Marcelo and agreed to participate in the study during the period 2020 to 2021. The data were extracted from the anamneses and respective medical reports of 308 women who had breast MRI scans and analyzed using the statistical software SPSS, version 26.0. **Results:** The predominant age group was 40 to 49 years with a relative frequency of 34.9%, followed by 50 to 59 years representing 26.7%, women over 60 years presenting a frequency of 19.9%, and 18 to 39 years with a relative frequency of 18.6%. Regarding clinical indications for breast MRI, breast lump presented 28.2% of indications, breast prosthesis control accounted for 11.7%; family history of cancer 11.7%, breast cancer control 9.4%; post-treatment control 8.4%, screening 6.5%, breast cancer follow-up 5.5%, dense breast 5.5%, family history of cancer and nodule 4.9%, preoperative 3.2%, asymmetry 2.3%, microcalcifications 1.3% and breast cancer mutation 1.0%. In the Bi-Rads classification, higher percentage for Bi-Rads 2 representing 49.8% and Bi-Rads 3 with frequency of 27%; Bi-Rads 4 representing 13.4%, Bi-Rads 6 with 5.5%, Bi-Rads 1 with 3.3% and Bi-Rads 5 representing 1.0% of the classifications of the medical reports. **Conclusion:** This study showed the predominant age group of the women attended was 40 to 49 years, and the most prevalent clinical indication prevalence for breast MRI was breast lump.

Keywords: prevalence, breast MRI, screening

IMMUNOPHENOTYPING OF BREAST CANCER ASSOCIATED WITH SOCIODEMOGRAPHIC AND LIFESTYLE CHARACTERISTICS

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Objective: The immunohistochemical profile of breast cancer is based on the evaluation of estrogen and progesterone receptors, HER2 expression and cell proliferation index. An investigation of the association of immunophenotyping of invasive breast cancer with sociodemographic characteristics and lifestyle becomes important in view of the scarcity of research in mixed populations such as the Brazilian. **Methodology:** Thus, this cross-sectional study performed the association of immunophenotyping of invasive breast cancer with sociodemographic characteristics and lifestyle in 583 patients seen in a cancer center in southeastern Brazil. Pearson's chi-square test or Fisher's exact test was used for statistical analysis **Results:** There was a higher frequency of women with the luminal B HER2 negative subtype (33.9%). The analysis of immunophenotyping with sociodemographic characteristics found a higher frequency of women aged 50 years or older in Luminal A, 65.5% (p=<0.040) and medical suspicion of breast cancer at clinical examination in HER2 positive, 89.7% (p=0.015). In this research, we found no association of immunophenotyping with marital cohabitation (p=0.856), education (p=0.723), ethnicity (p=0.129), access to hospital (p=0.686), tobacco (p=0.099) and alcohol consumption (p=0.270), Body Mass Index (p=0.584), performance of the first mammogram (p=0.477), family cancer history (p=0.254) and parity (p=0.676). **Conclusion:** We observed in the population analyzed that younger women had tumors with worse prognosis when compared to those aged 50 years or older. Ethnicity showed no association, contrary to the wide discussion in the literature about the high frequency of the triple negative subtype. There was no association with alcohol consumption, a factor recognized in the literature as a risk factor for the development of breast cancer.

Keywords: Breast Cancer, Lifestyle, Sociodemographic characteristics

APPROVED PAPERS FOR POSTER

CLINICAL CHARACTERIZATION OF PATIENTS WITH BREAST CANCER DOING FOLLOW-UP ON A REFERENCE HOSPITAL IN THE WEST OF SANTA CATARINA STATE, BRAZIL

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Objective: Describing clinical and laboratory parameters of patients with breast cancer doing follow-up on the city of Chapecó, from 2015 up to 2020. **Methodology:** Quantitative, retrospective, documental and descriptive research, on which were evaluated the medical chart of 64 female patients, diagnosed with breast cancer from 2015 up to 2020, doing follow-up in "Hospital Regional do Oeste" in the city of Chapecó, Santa Catarina state, Brazil. The data were evaluated through: mean (± standard deviation), total and relative frequency. This research was approved by the Unochapecó's involving human being's ethics committee under the n. 52495721.8.0000.0116. **Results:** The average age of the analyzed patients was 52,7 years (SD± 11,3 years). Regarding the carcinoma subtype, 89,06% of the patients had the ductal subtype and 10,94% had other types of carcinoma (lobular, tubular, mucinous and papillary). About molecular subtypes, were found four variations: Luminal A (n=28), Luminal B (n=28), triple negative (n=5) and HER2 enriched (n=3). Besides that, when evaluating the pathologic state, it was noticed that 26,56% presented compromised lymph nodes and 9,38% had metastasis. **Conclusion:** Although the scientific literature indicates that the most common molecular subtype is the luminal A (about 60% of all breast cancers), in this study it could be verified a similarity of prevalence percentages between the molecular subtypes luminal A and B. The molecular subtype luminal B, has a worst prognosis, higher risk of reappearance and lower survival rate when compared to the luminal A molecular subtype.

Keywords: Breast carcinoma; molecular subtypes; Santa Catarina state.

APPROVED PAPERS FOR POSTER

ANALYSIS OF WOMEN WITH BREAST CANCER SUBMITTED TO IMMEDIATE OR DELAYED BREAST RECONSTRUCTION

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Objective: Breast reconstruction is a right guaranteed by the public health system to patients undergoing mastectomy. However, there are factors that delay the performance of this procedure, mainly in the single health system. To analyze the characteristics of immediate or delayed reconstructions in women with breast cancer in a referral hospital in the state of Pernambuco(Barao Lucena Hospital. **Methodology:** This is an observational, retrospective, analytical research with a descriptive approach of 400 cases of breast reconstruction from 2010 to 2020. Data were collected through a clinical-surgical questionnaire from patients with breast carcinoma who underwent reconstruction mammary, being later analyzed by the software SPSS, version 18 with the percentages of the categories evaluated by the chi-square test, considering the level of significance of 5%. The comparison of analyzes was significant ($p < 0.005$), demonstrating that the profile described is the most frequent in the group of patients evaluated CAAE: 42457420.1.0000.5193 **Results:** Most patients with a mean age between 46 and 59 years (45.3%), mixed race (61.1%), married (79.1%), with schooling up to high school (60.7%), housewives (45 %), non-smokers (84.9%), who do not consume alcohol (94.9%). Using the TNM system, 84% of the patients were in the initial stages, underwent immediate reconstruction after mastectomy or sectorectomy in (70.3%), and the reconstruction surgeries with regional flaps such as inferior, superior or mediolateral and implants were performed in 70% of the patients. According to the molecular subtype, Luminal A represented 60% of the patients, followed by Luminal B with 16b%, triple negative with 15% and HER -2 with 9%. **Conclusion:** The findings support that patients with high educational levels are able to immediately undergo breast reconstruction. We conclude that the number of immediate breast reconstruction in patients with breast cancer had a significant increase

Keywords: Breast Cancer Treatment, Epidemiology, Mastectomy, Breast Cancer, Breast Reconstruction

APPROVED PAPERS FOR POSTER

AXILLARY LYMPH NODE CLIP PLACEMENT AND RESECTION AT SURGERY: A SINGLE-CENTER STUDY

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Objective: Identify the characteristics of patients who underwent axillary lymph node clipping (ALC) and to determine the detection rate with sentinel node biopsy (SNB). **Methodology:** Retrospective study,with review from medical records, including patients that were submitted to ALC from 2018 to 2021, who underwent neoadjuvant chemotherapy (CH) or upfront surgery. In patients with SNB, the clipped node was marked with Technetium-99m before surgery. **Results:** We identified 13 patients that underwent ALC at diagnosis: 8 were submitted to SNB and 5 to axillary dissection without SNB (4 due to poor response to CH, 1 due to lobular histology with upfront surgery). The mean age was 54 years old, (38% <50 years old). The clinical staging was: 12 with cT2cN1 – IIB and 1 with cT3cN2- IIIA. Concerning tumor characteristics, 12 (92%) patients had ductal histology and 1 lobular; 3 patients had triple negative disease (23%), 8 patients had luminal disease (61%) and 2 patients had triple positive disease (15%). In 4 of the 8 patients who underwent SNB, the clip was identified in the image after surgery (2) or in the frozen section (2), and in 4 patients no information regarding the localization of the clip was obtained in the records regarding the surgery. However, in the follow-up images, the axillary clip was not identified, presuming that it was removed. Considering the patients that did SNB, the detection rate was 50%. **Conclusion:** According to previous studies, ALC at time of diagnosis is a useful tool to guide targeted axillary dissection, reducing the false negative rate (FNR) of SNB after CH. It's important that the clip removal check is performed. Our results reflect that this verification is not always performed, which may have reduced identification rates. However, this study encourages further prospective studies to be carried out, with standardization of techniques for clip identification, improving detection rates and reducing FNR of SNB in these patients.

Keywords: Axillary lymph node clipping, sentinel node biopsy.

EVALUATION OF THE APPLICABILITY OF THE ACOSOG Z0011 STUDY IN THE AXILLARY TREATMENT OF PATIENTS WITH EARLY BREAST CANCER, IN A TERTIARY-LEVEL HOSPITAL IN THE FEDERAL DISTRICT

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Objective: To evaluate the applicability of ACOSOG Z0011 in the axillary treatment of early breast cancer. Identify whether there was an impact on reducing axillary dissection. **Methodology:** Observational, descriptive and retrospective study with data collected from the medical records of patients who underwent surgical treatment at the service. **Results:** From June 2017 to June 2021, 119 patients from the Mastology service of the Hospital de Base of the Federal District met the ACOSG Z0011 eligibility criteria. However, 9 patients were excluded due to failure of patent blue migration, therefore, 110 patients were included. The median age was 59 years. The predominant immunohistochemical profile was luminal B with 55% (61), followed by luminal A 30% (33), HER2 positive in 9% (10), triple negative in 6% (6). Of the patients included, 27% (29) had sentinel lymph node (SL) with metastasis. Of these 29 patients, 21 (19%) had metastasis in 1 SL, 3 (3%) had metastasis in 2 SL, and 5 (5%) had 3 or more metastatic SL. Twenty-four patients had 1 or 2 SL with micro and/or macrometastases and did not undergo lymphadenectomy. **Conclusion:** Omission of axillary surgical treatment in 83%.

Keywords: Breast cancer; sentinel lymph node; Axillary metastases; Lymphadenectomy.

EPIDEMIOLOGICAL ANALYSIS OF WOMEN WITH BREAST CANCER SUBMITTED TO BREAST RECONSTRUCTION IN A TERTIARY HOSPITAL IN PERNAMBUCO

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Objective: Breast reconstruction is a right assured by the public health system to patients submitted to mastectomy. However, there are factors that delay the performance of this procedure. To understand the epidemiological profile of women with breast cancer who underwent breast reconstruction in a reference hospital in the state of Pernambuco **Methodology:** This is an observational, retrospective research with an analytical character and descriptive approach. The data were collected through a questionnaire sociodemographic and clinical-surgical history of patients with breast carcinoma, and then analyzed by SPSS software, version 18 with the percentages of the categories evaluated by the Chi - square test, considering the significance level of 5%. The comparison of analyses was significant ($p < 0.005$), showing that the profile described is the most frequent in the group of patients evaluated. CAAE: 42457420.1.0000.5193 **Results:** A non-probabilistic sample of 400 records was obtained in ten years at a tertiary hospital in Recife (PE), most of them with mean age between 46 and 59 years (45.3%), brown (61.1%), married (79.1%), with education until high school (60.7%), household professionals (45%), non-smokers (84.9%), who do not consume alcohol (94.9%) and had immediate reconstruction after mastectomy (70.3%). **Conclusion:** The findings support that patients with high educational levels are likely to undergo immediate breast reconstruction. Pointing out that the socioeconomic level significantly influences the rates of breast reconstruction after mastectomy

Keywords: Breast Cancer Treatment, Epidemiology, Mastectomy, Breast Cancer, Breast Reconstruction

APPROVED PAPERS FOR POSTER

DELETERIOUS VARIANTS IN RAD51C GENE AND BREAST CANCER – REPORT OF THREE PATIENTS WITH TRIPLE NEGATIVE BREAST CANCER

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RAD51C is a gene associated with hereditary predisposition to ovarian cancer, and its association with hereditary breast cancer was controversial for a while. Current evidence demonstrates that RAD51C deleterious variants increase the risk of oestrogen receptor negative breast cancer. This study presents three unrelated patients with triple negative breast tumors with heterozygous deleterious RAD51C variants. The first patient was diagnosed with post-menopausal breast cancer at 55 years of age, treated with conservative surgery and adjuvant chemotherapy. Her sister had breast cancer at 49 years of age. Multigene panel showed a heterozygous pathogenic variant in RAD51C:c.93del; p.(Phe32Serfs*8). The second patient was diagnosed at 48 years of age, treated with neoadjuvant chemotherapy, followed by conservative surgery with lymph node dissection and radiotherapy. Her sister had triple negative breast cancer at 64 years of age, maternal cousin had breast cancer at 58 years of age. Multigene panel disclosed a heterozygous pathogenic variant in RAD51C:c.404G>A; p.(Cys135Tyr). The third patient, detected with the same mutation, was diagnosed with triple negative breast cancer at 39 years of age, and treated with neoadjuvant chemotherapy, bilateral mastectomy and adjuvant radiotherapy. Her paternal aunt had ovarian cancer, her paternal grandfather had prostate cancer and his sister had breast cancer at 40 years of age. Genetic counseling was provided for all patients, along with the recommendation of risk-reducing salpingoophorectomy, due to ovarian cancer risk. This study adds evidence for the inclusion of RAD51C gene in multigene panels, as a relevant gene to be screened in patients with triple negative breast cancer.
**All three patients signed an informed consent

Keywords: triple negative breast cancer; hereditary cancer predisposition; RAD51C gene

APPROVED PAPERS FOR POSTER

ULTRASOUND-GUIDED VACUUM-ASSISTED RESECTION: REPORT OF A CASE SERIES

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Objective: OBJECTIVES: We aim to report a series of cases of lesions that were probably benign (ACR® BI-RADS 3) and with a low degree of suspicion (ACR® BI-RADS 4A) submitted to vacuum-assisted resection for diagnostic and therapeutic purposes. **Methodology:** METHODS: From August 2020 to January 2022, 16 patients underwent ultrasound-guided 10 Gauge vacuum-assisted needle resection under local anesthesia. The biopsy needle was positioned according to the echographic view of the lesion, in order to obtain the fragments by suction. After procedure, a titanium clip was positioned demarcating the site. **Results:** RESULTS: We performed 16 vacuum-assisted resections in lesions whose largest diameter varied between 0.4cm and 2.5cm (median=1.4cm and standard deviation (SD) =0.66). We obtained samples whose measurement of the set of fragments varied between 2.2cm and 3.6cm (median =3.0cm and standard deviation (SD) =0.37). Of the 16 cases, 15 histologies were benign, predominating fibroadenomas and having 2 complex sclerosing lesions. Only 1 ductal carcinoma in situ. We had 1 case of hematoma with clinical repercussions and 1 case of increased bleeding at the skin incision site, both managed conservatively with good evolution. **Conclusion:** CONCLUSION: In our case series, vacuum-assisted resection allowed the investigation and, in most cases, the necessary therapy for the management of BI-RADS 3 and BI-RADS 4A lesions when the histology was benign and provided sufficient diagnostic data for the conduction of the case of carcinoma in situ, in which the conservative surgery performed maintained the same histological diagnosis. Vacuum-assisted resection can, in selected cases, replace a diagnostic and/or therapeutic surgical procedure, reducing morbidity and costs in the investigation and treatment of breast lesions, with minimal complications.

Keywords: vacuum-assisted resection, ultrasound, breast lesions

APPROVED PAPERS FOR POSTER

NEUROENDOCRINE CARCINOMA OF THE BREAST AND ILEUM IN A PATIENT WITH BRCA2 PATHOGENIC VARIANT – ONCOLOGIC AND GENETIC CONSIDERATIONS DERIVED FROM A CASE REPORT

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Background: Neuroendocrine neoplasms (NENs) are a heterogenous group of neoplasms. Most frequently, they occur in the digestive system, and breast neuroendocrine tumors constitute less than 1% of all of them. Germline mutations can increase the risk of developing tumors and predispose to hereditary cancer syndromes. Some NENs are well established components of common hereditary syndromes. Recently, whole genomic sequencing revealed that 17% of apparently sporadic pancreatic NENs carried germline mutations, including DNA repair genes, as BRCAs. Itʼs well known the role of this gene in hereditary breast cancer, but variations in these genes were not described in patients with breast/ileum neuroendocrine tumors. We present a patient with neuroendocrine tumor and a germline pathogenic variant in BRCA2. Case Report: A 44 years old female patient presented with a palpable lesion at right breast, with 1.1x1.4cm, and a biopsy confirmed an invasive ductal carcinoma, grade 2. Immunohistochemistry revealed a neuroendocrine breast carcinoma (ER10% PR5%, HER2 negative, Ki67=8%). The regular staging exams didn't show any abnormalities but a 68Ga PET/CT demonstrated an ileum wall thickening with a marked expression of somatostatin receptors compatible with primary disease, with mesenteric lymph nodes and hepatic lesions suggestive of metastasis, in addition to the right breast lesion that could be either a secondary implant or a primary synchronic tumor. A detailed family history didn't reveal any important cancer cases in the family, except for the father and a paternal uncle, both with prostate cancer at 72 and 85 years old, respectively. Germline genetic analysis confirmed the presence of a heterozygous pathogenic variant in BRCA2 (c.2167delA;p.Ser723Alafs*7). The patient is currently treating with octreotide LAR, with good tolerance, and stable disease. Final Comments: This case shows the importance of molecular germline investigation in patients with NENs. This patient adds knowledge to the association of BRCA2 gene and neuroendocrine tumors.

Keywords: Neuroendocrine neoplasms. Breast cancer. Ileum neuroendocrine tumors. Germline pathogenic variant. BRCA2.

APPROVED PAPERS FOR POSTER

MALE BREAST CANCER ASSOCIATED WITH A LARGE DELETION IN BLM GENE – REPORT OF A CASE

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Malignant breast neoplasm in men is rare, corresponding to less than 1% of all breast neoplasms, and 100 times less frequent than in women. It is molecularly different from female breast cancer, and germline pathogenic mutations in genes aside from BRCAs have been recently associated with an increased risk of male breast cancer. Here we report an elderly male, 71 years old, with a malignant neoplasm in the left breast, with positive hormone receptors, Her2 negative, Ki67 25%. A modified radical mastectomy was performed, and surgical specimen showed a micropapillary invasive mammary carcinoma, 1.9cm, 2 of 11 lymph nodes positive, pT1cpN1acM0. He was treated with adjuvant chemotherapy and radiotherapy, followed by endocrine therapy. His mother had breast cancer at 50 years, and his smoking father died of lung cancer. During his treatment, a multigene panel was done and a heterozygous likely pathogenic large deletion involving exons 20 to 22 of the BLM gene was found, associated with a variant of unknown significant in the same gene; c.3427G>A; p.(Glu1143Lys). All his 3 daughters harbor the same mutation. The risk of breast cancer in association with heterozygous pathogenic variant in BLM gene is still controversial, as its ability to cause tumor when not associated with polymorphisms in other homologous recombination genes, which poses a challenge for genetic counseling, surveillance, and management. This report aims to add data and clinical evidence to the attempts to elucidate the role of BLM germline variants in breast cancer predisposition.
*Patient signed an informed consent

Keywords: male breast cancer, cancer predisposition, BLM gene

APPROVED PAPERS FOR POSTER

BREAST PLASMACYTOMA: A CASE TREATED WITH IRRADIATION THAT EVOLVED TO FURTHER BILATERAL BREAST INVOLVEMENT AND SYSTEMIC DISEASE REFRACTORY TO CHEMOTHERAPY

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Introduction: Plasmacytomas are uncommon malignant lesions in the breast. Further knowledge is needed about presentation, diagnosis and therapy of this disease. **Case report:** A 78-year woman had a previous diagnosis of sacral bone plasmacytoma in March 2005 that was treated with radiotherapy. A new lesion involved the cervical spine in 2008, that was also irradiated. Mammogram and ultrasound found in January 2012 two well defined nodules at the upper outer quadrant of the right breast, with a total diameter of 38 mm. Biopsy showed a proliferation of cells with KI67 staining in more than 90% and positivity for CD38, CD138, CD45 and CD79A. Exclusive expression of lambda light chains. Pathologic diagnosis was anaplastic plasmacytoma. She received radiotherapy, with remission of the breast lesions. After further appearance of bone lesions she started chemotherapy with bortezomib, melphalan and prednisone in January 2016. A PET study in July 2016 showed, among other findings, the presence of a 4 cm. lesion at the upper outer quadrant of the left breast (SUVmax: 3.9). Biopsy gave a diagnosis of plasmacytoma, with cells staining strongly positive for CD138, MUN1 and CD38, with expression of lambda light chain. Chemotherapy was changed to lenalidomide plus dexamethasone. A further PET in January 2017 displayed, among other findings, the persistence of the lesion in the left breast (SUVmax: 5.4) with 2 new lesions in the right breast (SUVmax: 5.3 and 13). There was also sacral progression and chemotherapy was changed to pomalidomide, dexamethasone plus cyclophosphamide. Evolution of the patient was unfavorable, and she died in June 2017. Criteria for multiple myeloma was not present along the course of the disease. **Conclusion:** Evolution to bilateral involvement, relapse in the same breast and refractoriness to chemotherapy are remarkable aspects of this case report and give further information about this presentation of disease.

Keywords: Plasmocytoma, Breast cancer, Radiotherapy

PREPECTORAL BREAST RECONSTRUCTION. PRELIMINARY REPORT OF A CHILEAN EXPERIENCE IN 46 PATIENTS

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Prepectoral total breast reconstruction (PPTBR) has become a popular technique due to many benefits observed within properly selected patients. Compared with retropectoral implant position, PPTBR has the advantage of maintaining the pectoral major muscle in its anatomic original position, avoiding acute and chronic pain, maintaining better extremity strength and motion, avoiding animation deformity and post radiotherapy pectoral fibrosis. The basic principles of the technique can be used with a tissue expander or permanent implants. We present the preliminary report of 46 patients (51 breast). 20 out of the 46 patients have association with radiotherapy, 18 of them received post mastectomy radiotherapy (PMRT) and 2 had received total breast irradiation on previous conservative treatment. The period of follow up is 2 to 32 months, beginning in July 2019. The main surgical approach was using a lateral aspect of the inframammary fold incision. Depending on the new subdermal implant pocket wide, in 20 patients a synthetic mesh was placed. We had only 2 major complications, one who required reintervention due to radionecrosis and conversion to Dorsal Flap plus permanent implant and the other required a change into a retropectoral plane reconstruction due to wound dehiscence. No implant infection of grade 3-4 capsular contraction has been reported so far. The aesthetic result was excellent for most patients and the surgeon's opinion according to Harris scale.

Keywords: Prepectoral breast reconstruction, implant base breast reconstruction, breast cancer

CASE REPORT: PHYSIOTHERAPY TELESERVICE IN THE IMMEDIATE POSTOPERATIVE BREAST CANCER SURGERY

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ABSTRACT

Introduction: Breast cancer is one of the most incidents and the most common among women, surgical intervention is the main treatment and physiotherapy plays an important role in postoperative period, especially in the maintenance of range of motion and prevention/control of lymphedema. In the face of the contemporary scenario in which social isolation has been maintained due to the COVID-19 pandemic, the Federal Council of Physiotherapy and Occupational Therapy in Brazil released forms of remote care for patients who need clinical intervention. **Objective:** To report the experience of telecare in physiotherapy in the postoperative period of breast cancer surgery, focusing on aspects, pain, fatigue, mobility of the upper limb and development of lymphedema. Case **Report:** Experience report based on the telecare of a 61-year-old mastectomized patient, with 9 consultations, 8 in the remote format. The participant was evaluated regarding health habits, edema, sensation of pain and tiredness using the Visual Scale of Pain, Borg Rating of Perceived Exertion Scale and self-authored mastology questionnaire. In the initial evaluation, we found movement limitation (flexion-90º, extension-30º and abduction-90º), the story of sensation of tightness in the scar, a sensation of a heavy limb and dryness in the side of the surgery. In the final evaluation, we observed improvements when compared to the member opposed to surgery, in the gain of range of motion (flexion-180º, extension-45º and abduction-180º), reduction of pain (VAS) and fatigue (BORG) and improvements in ADL's **Conclusion:** The service in physical therapy was effective and obtained results similar to those expected in a conventional face-to-face physical therapy treatment.

Keywords: Keywords: Breast Cancer, Physical Therapy Modalities, Telemonitoring.

APPROVED PAPERS FOR POSTER

SENTINEL NODE BIOPSY WITH MAGTRACE ® IN A HER-2 POSITIVE PATIENT DIAGNOSED DURING PREGNANCY WITH COMPLETE CLINICAL RESPONSE TO NEOADJUVANT TREATMENT

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During the last decades, there has been significant progress in breast cancer diagnosis and treatment, which has led to improvement in overall and breast cancer specific survival. It has also enabled the possibility of de-escalating the extent of surgeries. There is growing evidence that supports sentinel lymph node biopsy (SLNB) after neoadjuvant treatment, even in cases with positive lymph nodes at diagnosis. One of the key goals is the achievement of low false negative rates (FNR) for SLMB detection. Technetium-99 (Tc99) is considered the gold standard tracer worldwide. Nonetheless, the access to a nuclear medicine department, the timing of Tc99 injection, operating room schedules and administrative limitations, can cause increasing overall costs of care and patient discomfort. There is compelling evidence that supports the use of new tracers, one of these is the superparamagnetic iron oxide (SPIO, Magtrace®). The SPIO allows the detection of the sentinel node marking hot spots and has the advantage of dyeing the nodes it with a brownish colour. We present a novel experience with this tracer in a Chilean public hospital. A 33-year-old patient diagnosed with right breast cancer during pregnancy (21 weeks). The core biopsy informed an invasive ductal carcinoma Her-2 positive, cT2N0M0 (25 mm). The patient completed neoadjuvant chemotherapy and pregnancy interruption was scheduled at 37 weeks by caesarean section. Trastuzumab (TTZ) was initiated right after delivery and breast conservation surgery with SLNB using SPIO and blue dye was performed thereafter. Intraoperative biopsy informed three negative nodes, concordant with the hot spots and dyeing seen in surgery. This case shows the efficacy of neoadjuvant treatment and TTZ in Her-2 positive patients with a high rate of complete clinical response. Also, in our opinion, this new tracer is an excellent and affordable alternative to Tc99 and could avoid the use of blue dye.

Keywords: Breast Cancer, Neoadjuvant treatment, Sentinel Node, Pregnancy and breast cancer.

IRON OVERLOAD IN A BREAST CANCER PATIENT WITH A HOMOZYGOUS MUTATION IN THE HFE HEMOSTATIC IRON REGULATOR GENE: CONSIDERATIONS REGARDING THE USE OF ADJUVANT HORMONE THERAPY

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Introduction: Homozygous mutations in the HFE gene are among the causes of iron overload worldwide. Several reports suggest an increased risk of breast cancer (BC) in these patients, although there are controversial evidences on this subject. There is some discussion on the tolerance to some BC adjuvant therapies in these patients regarding aspects like the potential cardiotoxicities. Information on adjuvant hormone therapy in this setting is very limited. **Case report:** A 65-year woman was treated with segmental resection in the left breast and selective biopsy of the sentinel node in April 2019. Pathology showed an infiltrating ductal carcinoma of 1.2 cms, grade 1, with 2 negative sentinel nodes. Estrogen receptor: 100%. Progesterone receptor: 20%. Her2/neu: 1+. Ki67: 15%. A previous diagnosis of hemochromatosis was done in October 2018, with high transferrin saturation and a genetic analysis disclosing a homozygous C282Y mutation in the HFE gene. Regular phlebotomies every 3 months were scheduled for the treatment of the iron overload. Several points were regarded for the selection of the adjuvant hormone therapy. Articular damage is a common complication of hemochromatosis. In fact, a hip prosthesis was implanted in 2018 to our patient for severe coxarthrosis. There is some risk of further articular impairment with aromatase inhibitors (AI). Furthermore, AI may have an androgenic effect, with some effect on the red cell mass. On the contrary, tamoxifen may increase the risk of porphyria crises in patients with hemochromatosis. We selected letrozole as adjuvant therapy, with good articular tolerance and fair hematological control after nearly 3 years of follow-up. **Conclusion:** Although homozygous HFE mutations may increase the risk of some adverse events related to BC adjuvant hormone therapy, the tolerance to letrozole in our patient has been very good, without raising further concerns.

Keywords: Breast cancer, Iron overload, hormone therapy, HFE gene

LOCALLY ADVANCED SYNCHRONOUS BILATERAL BREAST CANCER: A RARE CASE REPORT

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INTRODUCTION: Synchronous bilateral breast cancer (SBBC) consists of the simultaneous presence of two primary tumors at diagnosis. There is no consensus on its origin, and it may be a metastasis of a primary lesion or a second independent tumor. The incidence of SBBC has been reported to be approximately 3%. The prognosis of SBBC was considered to be reserved, which is why bilateral mastectomy is the preferred approach. **CASE REPORT:** A 44-year-old patient with no family record of gynecological neoplasm sought care reporting bilateral breast pain and palpable nodular lesions on the breasts. On examination, a hard nodulation measuring 10x12cm was palpated on the left breast (LB) associated with ulcerated areas in the superior lateral quadrant. In the right breast (RB), a mobile nodulation was palpable, measuring 8x8cm and chocolate-colored nipple discharge. Clinically positive axillary lymph nodes bilaterally. She had a mammogram, which showed a nodule with spiculated contours, measuring 2.5 cm in the SLQ of the LB, with apparent associated dermal retraction and multiple, grouped microcalcifications on RB-BIRADS 5. She underwent core biopsy, which its result was invasive lobular carcinoma and dermal infiltration, with immunohistochemistry (IHC): positive PR and ER, positive HER2, ki67 positive in 40% on LB and carcinoma invasive ductal, non-special type, with IHC: negative RP and RE, HER2 score 3+, ki67 positive 60% on RB. She underwent neoadjuvant chemotherapy, followed by bilateral mastectomy with sentinel lymph node biopsy. The anatomopathological (AP) study of the LB surgical specimens revealed residual ductal carcinoma in situ, free margins, and neoplasm-free lymph nodes. The RB's AP revealed high-grade (comedocarcinoma), intermediate-grade residual intraductal carcinoma, alongside an extensive fibro hyalinized area of the stroma, foci of lobular cancerization, absence of residual invasive component, free margins, and absence of lymph node metastasis. The patient underwent adjuvant radiotherapy and hormone therapy with Tamoxifen.

Keywords: Breast Neoplasms; Synchronous Bilateral Breast Neoplasm; Mastectomy.

APPROVED PAPERS FOR POSTER

METASTATIC BREAST CANCER TO THE UTERINE CERVIX: A CASE REPORT

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A 49-year-old woman was diagnosed with invasive ductal carcinoma in the left breast positive, Estrogen and Progesterone Receptors (ER, PR), negative HER-2 and Ki 67 10%. Computed tomography of the abdomen, chest and bone scintigraphy did not show metastasis. Treatment was established with neoadjuvant chemotherapy, followed by sectorectomy, sentinel lymph node biopsy and oncoplasty. Freezing was negative but in the anatomopathological result metastasis in axillary lymph node was observed. Then, axillary lymphadenectomy was performed and she underwent radiotherapy and hormone therapy. About six months after, she remained asymptomatic and underwent oncotic colpocytology. It detected atypical squamous cells not being able to rule out intraepithelial lesion (ASCH). The investigation was continued by means of colposcopy and conization that showed poorly differentiated carcinoma and alterations suggestive of metastatic mammary carcinoma to the uterine cervix. This diagnosis was confirmed with immunohistochemistry: Her-2 negative, ER and PR 95% and Ki 67 30%. Magnetic resonance imaging of the chest, pelvis and abdomen and transvaginal ultrasound showed no suspicius lesions. She was currently diagnosed breast nodule ultrasound with a Bi-RADS 4 and is still under anatomopathological investigation. DISCUSSION: Metastasis to the female genital organ originating from a primary extragenital tumor is uncommon. The most common sites of invasive breast metastasis are lung, liver, bone and brain. Its occurrence in uterine cervix is rare, probably due a small bood supply and an afferent lymphatic system. Its prevalence is uncertain in literature. Only strict gynecological surveillance of these asymptomatic women permits early detection of these secondary lesions. This case report shows the importance of considering rare sites of metastasis on follow up given the different treatment protocol related to primary cancer and clinical impact on prognosis. Besides, it is pertinent to know the exact nature of cervical cancer, mainly in woman wich a personal history of breast cancer.

Keywords: breast cancer, metastasis, uterine cervix

SPOROTRICHOSIS IN AXILLARY LYMPHADENOPATHY SIMULATING RECURRENCE OF BREAST NEOPLASM: A CASE REPORT

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INTRODUCTION: Sporotrichosis is a mycosis caused by dimorphic fungi of the Sporothrix complex. It is an anthropozoonotic disease that can be transmitted to humans by contact with plants or animals, especially infected cats. Clinical presentation may vary depending on the host's immunological conditions. The diagnosis of sporotrichosis requires material obtained from lesion biopsies, which can be submitted to culture and microscopy. **CASE REPORT:** Female patient, 57 years old, being followed up for carcinoma in situ of the left breast, presented ipsilateral axillary lymphadenopathy in routine exams. She underwent ultrasound-guided core-needle biopsy of a suspicious lymph node in the left axilla, with a diagnosis of chronic granulomatous lymphadenitis containing fungal yeasts, suggestive of sporotrichosis. Treatment with systemic antifungal itraconazole was started, with a good response. **DISCUSSION:** sporotrichosis is an important differential diagnosis for lymphadenopathy, associated or not with neoplasms being treated in our country. In the present case, the patient had an oligosymptomatic presentation of sporotrichosis, probably a subacute form of the cutaneous-lymphatic presentation, initially evidenced only on evaluation with imaging methods, with a good response to systemic antifungal therapy with itraconazole, also remaining without signs of recurrence of breast cancer. **CONCLUSION:** Considering Brazil as an endemic area for sporotrichosis, the description of cases such as this one allows us to discuss and remember this differential diagnosis in clinical situations and/or in imaging exam findings, even in patients undergoing follow-up for malignant neoplasms.

Keywords: sporotrichosis, axillary lymphadenopathy, breast cancer

PRIMARY BREAST TUBERCULOSIS MASTITIS MANIFESTED AS NON-HEALING ABSCESS

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Primary breast tuberculosis is a rare extrapulmonary tuberculosis mainly affecting young women of childbearing age from endemic countries. Its incidence is increasing in immunocompromised and HIV-infected people, and with the emergence of drug-resistant strains of Mycobacterium tuberculosis. There are no specific clinical signs suggestive of this disease, it often presents as a hard mass or breast abscess. There is an overlap of features with other inflammatory, infectious, benign lesions, fat necrosis and malignant neoplasms of the breast. The detection of Mycobacterium tuberculosis remains the gold standard for diagnosis. Several other diagnostic modalities are used, with varying lack of sensitivity and specificity, and with a range of false negatives. A quarter of cases were treated solely on the basis of clinical, imaging or histological suspicion, without confirmation of the diagnosis. Therefore, we report the case of a young Vietnamese woman, presented for a non-healing breast abscess, and diagnosed with breast tuberculosis based on the patient's ethnicity, histological findings, lack of clinical response to conventional antibiotic therapy and a good clinical response to antituberculosis treatment.

Keywords: Breast abscess, Mycobacterium Tuberculosis, Extrapulmonary tuberculosis, Breast Tuberculosis, Case report.

INCIDENTAL FINDING OF SOLITARY FIBROUS TUMOR OF MALE BREAST

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Myofibroblastoma, also known as a solitary fibrous tumor of the breast, is a rare sporadic benign tumor composed of spindle-shaped tumor cells with myofiblast differentiation. The most typical presentation is a painless unilateral mass that is not connected to any surrounding structure and seldom surpasses 3 cm in size, and should be evaluated by using the triple assessment approach. They have several subtypes, and a definite diagnosis can only be confirmed safely after surgery using immunohistochemistry. Surgical excision serves an essential diagnostic and therapeutic purpose; MFB has a favorable prognosis even when excision margins are positive, and local recurrence is extremely rare. The following is the case of a 73-year-old man who presented with a dry cough. A myofibroblastoma was discovered by chance during the investigative work up and referred to our department. The patient's presentation, imaging, and histologic sample all supported the diagnosis, and he had surgical resection without incident. We present the second case of incidental finding of breast myofibroblastoma and urge clinicians to consider this differential diagnosis.

Keywords: solitary fibrous tumor; myofibroblastoma; breast; male; mastectomy; case report

EXTREME ONCOPLASTIC SURGERY IN A PATIENT WITH BREAST CANCER AND MACROMASTIA

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Until the 1970s – 1980s the only treatment recommended for breast cancer was mastectomy. During those years, prospective randomized trials confirmed the survival equivalency for breast conservation (when compared for patients with tumors 5 cm or smaller). During the last decades, there has been significant progress in breast cancer diagnosis and treatment. This progress has led to improved overall and breast cancer specific survival. Extreme oncoplasty is a breast conserving surgery, it use oncoplastic techniques in a patient who, in most cases, would require a mastectomy. This is particularly useful in patients with breast cancer and macromastia, with an oncoplastic reduction approach in the affected breast and reduction mammoplasty in the contralateral breast. We present the case of a 32 years old woman with a multifocal tumor located in the inner lower quadrante of the right breast. The core biopsy informed a invasive ductal carcinoma of 2.5 cm. (cT2 N1 Her-2 +). After neoadjuvant chemotherapy with trastruzumab, there was a complete clinical response. The surgical treatment was an extreme oncoplastic surgery in the affected breast with a reduction mammoplasty to the left breast. The surgical biospy informed a complete pathologic response both in the breast and the axilla. After a 7 months follow-up there is no loco regional recurrence and the aesthetic result is excellent both for the patient and the surgical team. We selected this case to prove than despite the covid-19 pandemic, it is possible to offer the best surgical treatment according to each patient, giving the option to a personalized medicine.

Keywords: extreme oncoplasty, breast reduction, reduction mammoplasty

HYPERCALCEMIA IN NEWBORN SECONDARY TO MALIGNANT HYPERCALCEMIA IN PREGNANT WOMAN WITH METASTATIC BREAST CANCER: CASE REPORT

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Pregnant multipara, 38 years-old, with initial suspicion of antibiotic-refractory mastitis. Breast biopsy revealed luminal type B invasive carcinoma and image showed bone and liver metastases. She developed oligosymptomatic hypercalcemia requiring hydration and underwent cesarean at 35 weeks and 6 days, two days later received an osteolysis inhibitor and a week later started chemotherapy. The baby was born with Apgar 9/10; after 12 hours from the birth was observed hypercalcemia; then, 21 hours after he developed lethargy, hypotonia and bradypnea requiring CPAP and monitoring. He received volume expansion with improvement in his condition. Signs of breast cancer are confused with physiological breast changes in pregnancy such as engorgement, hypertrophy and nipple discharge implying a delay in diagnosis. Hypercalcemia during pregnancy occurs in about 0.03% of women, maternal complications include acute kidney injury, severe hypertension and pre-eclampsia. Fetal adverse outcomes include intrauterine growth restriction, fetal demise in utero, neonatal hypocalcemia, tetany, and permanent hypoparathyroidism. Primary hyperparathyroidism is the main cause, hypercalcemia from metastatic breast cancer can be due to osteolytic metastases and humoral hypercalcemia of malignancy caused by peptide release related to parathyroid hormone, which promotes bone resorption and renal calcium reabsorption. In cases of malignant hypercalcemia pamidronate is effective in inhibiting osteolysis, but it reduces uterine contractions and presents a teratogenic risk. Calcitonin is well tolerated during pregnancy but has limited effect; the use of glucocorticoids can also be considered. In case of maternal hypercalcemia, the newborn's calcium levels must be monitored. Hypercalcemia in pregnancy is a rare condition when cancer related may cause great maternal morbidity and fetal and neonatal morbidity and mortality. The manifestations presented by the neonate were compatible with the suspicion of neonatal hypercalcemia. Diagnostic confirmation was made based on the metabolic condition; the basis of emergency treatment is intravenous hydration.

Keywords: breast cancer, hypercalcemia, pregnancy

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CONSERVATIVE SURGERY IN ADENOID CYSTIC CARCINOMA: CASE REPORT

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Objectives: Adenoid cystic carcinoma of the breast (CACM) is uncommon, comprising less than 0.1% of breast carcinomas. In the literature, many authors argue that local control is achieved through mastectomy, especially in high-grade histological tumors. We report a case of CACM treated with conservative surgery at the Mastology Service of Hospital das Clínicas da UFMG. Methodology: ASG, 62-year-old, female patient presented with a 2 cm palpable nodule in the left breast, with mammographic representation: isodense nodule in the upper lateral quadrant, obscured contours, measuring 20 mm. She underwent diagnostic sectorectomy and was diagnosed with basaloid solid type CACM, grade 3, triple negative, measuring 1.5 cm, with compromised lateral and anterior margins. She underwent a new sectorectomy and sentinel lymph node biopsy, with no invasive neoplasm in the sample and four sentinel lymph nodes, all free of metastasis. Subsequently, she underwent radiotherapy. On biopsy, CACM, grade 2, triple negative was diagnosed. She was treated with conservative surgery and radiotherapy. Results: Follow-up with no signs of local recurrence or distant metastasis at one-year follow-up. Conclusion: Although most adenoid cystic carcinomas present with the Basal-like, Triple Negative phenotype, these tumors are generally of low histological grade and present an indolent biological behavior. Based on these clinical characteristics, the most recent studies have demonstrated the effectiveness of treatment with a complete excision of the tumor with wide margins and the addition of radiotherapy.

Keywords: Breast Neoplasms/ Adenoid Cystic Carcinoma/ Surgery Adenoid Cystic Carcinoma

THORACIC RECONSTRUCTION: THE IMPORTANCE OF PLASTIC SURGERY IN ONCOLOGY TREATMENTS

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Introduction: Breast cancer is the most common neoplasm in women, excluding non-melanoma skin neoplasm and it represents 22% of new cases each year1,2. Due to treatments breakthroughs, patient survival has increased, which indicates that social and functional rehabilitation through chest wall reconstruction as its paramount component. **Objective:** Report a case of a patient with recurrent breast cancer and need for chest wall reconstruction. **Case report:** LLVA 47 years old, with cancer in its right breast treated with partial mastectomy, radiotherapy and chemotherapy, which evolved to a chest wall undifferentiated pleomorphic sarcoma. A complex thoracectomy was performed in oncology with tumor resection in the right chest wall and resection of the 3rd, 4th, 5th and 6th costal arches, followed by a reconstruction, accomplished with 2 acetabular plates and a 42-cm polypropylene mesh. Afterwards, a rotation of myocutaneous flaps with latissimus dorsi and transversus rectus abdominis (TRAM) with contralateral pedicle was performed. The patient evolved with fair flaps perfusion. **Discussion:** The plastic surgeon participation in oncological treatments have shown increasing importance, allowing the performance of large resections that could be considered unresectable without its repair. Thus, a reconstruction is essential to increase life quality and provide local conditions for accessorial treatment5. During chest wall reconstruction, the technical difficulty lies in the extent of resections, requiring reconstruction of the costal bone framework when there is resection of four or more ribs or when there is a lateral defect greater than 5 cm6. The most used flaps are the latissimus dorsi myocutaneous and the TRAM flap7. **Conclusion:** The plastic surgeon is a fundamental character of a multidisciplinary team in the treatment of the breast cancer, especially in large resections situations.

Keywords: Breast Neoplasms; Myocutaneous Flap; Surgery, Reconstructive; Surgery, Plastic

APPROVED PAPERS FOR POSTER

PHOTOBIOMODULATION AND MANUAL LYMPH DRAINAGE FOR THE TREATMENT OF NIPPLE NECROSIS IN BREAST CANCER PATIENT: TWO CASES REPORT

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Introduction: Breast cancer is the most common malignant neoplasm among women in the world and in Brazil, accounting for approximately 28% of new cases each year. Recently, the breast reconstruction after mastectomy with preservation of the nipple has been an alternative breast cancer treatment. However, despite its efficacy and esthetic superiority, the preservation of the nipple, has been associated with several complications in the postoperative period. The therapy of photobiomodulation, formerly known as low-level laser therapy, demonstrated to promote repair of tissues, by cellular repair biostimulation, angiogenesis and anti-inflammatory effects. These characteristics suggest a potential role for repair of chronic wounds and that may be applicable in the treatment of necrosis. **Objective:** the study aimed to observe the effects of the physiotherapeutic intervention through the photobiomodulation therapy in two patients with nipple necrosis after mastectomy. **Methods:** Two Brazilians female with a necrosis of more than 40%of the nipple on the right breast after breast mastectomy and reconstruction were referee to Physical Therapy (PT). PT sessions were composed by manual lymph drainage, manual therapy, exercises of strengh and flexibility, followed by photobiomodulation. Patient 1 received lasertherapy with laser 660 nm, 3 joules per point at every 1 cm. The device used was Laser therapy DMC, power output 100mw. Therapy was implemented for 12 times in total a reevaluation was performed monthly untill 12 months of follow-up. Patient 2 received ledtherapy with 660 nm and 850 nm, 3 joules per point at every 2 cm. The device used was Ledtherapy Cosmedical, power output 5mW, totalizing 24 treatments and follow up was performed untill 6 month pos-therapy. **Conclusion:** Photobiomodulation was helpful for wound healing. Confirmation of the sustained effects of photobiomodultion were shown in a 6 months follow-up.

Keywords: Breast cancer,nipple necrosis, Low-level laser therapy, Photobiomodulation

APPROVED PAPERS FOR POSTER

THE IMPORTANCE OF MANAGING B3 LESIONS: CASE REPORT

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The lesions of uncertain malignant potential of the breast, classified as B3, besides increasing the relative risk for breast cancer, have very heterogeneous abnormalities and raise a big questioning when defining conducts. A good multidisciplinary evaluation is necessary, comparing biopsy and imaging exam results. This paper reports the case of a 54-year-old patient, without other risk factors for breast cancer, who came referred to MAMARJ, a mastology clinic, from a gynecology service, in November 2019 for evaluation of category 4 mammography, due to alterations in the right breast: linear and heterogeneous calcifications in the upper outer quadrant (UOQ) and punctiform and grouped calcifications lower inner quadrant (LIQ). Mammotomies were indicated, and histopathological reports were compatible with columnar cell hyperplasia with a focus of planar atypia - in the UOQ - and adenomyoepithelioma and columnar cell hyperplasia without atypia - in the LIQ. She was taken to surgery to remove the lesion from the UOQ (histopathology without malignancy). In July 2020, she underwent mammography with a category 2 (BIRADS) report due to parenchymal distortion from previous surgery, and ultrasonography with sparse cysts and bilateral ductal ectasia (category 3). One year later, in July 2021, she presented mammography - amorphous calcifications in the upper quadrants and punctate calcifications in the LIQ, near clip from previous mammotomy. Mammotomy of the calcifications in the upper quadrants was performed. The diagnosis of the vacuum-guided biopsy was columnar cell changes with minimal architectural atypia in the upper quadrants. Removal of the lesion from the upper quadrants and the LIQ (target of previous mammotomy) was indicated. The histopathological diagnosis was ductal carcinoma in situ (LIQ), associated with atypical ductal hyperplasia, microcalcifications and flat epithelial atypia. Immunohistochemical panel: estrogen receptor (ER) positive, progesterone receptor (PR) positive, human epidermal growth factor receptor-type 2 (HER2) negative. The upper quadrants lesion was compatible with focus of intraductal proliferation with discrete atypia. Simple mastectomy was performed with immediate reconstruction in the right breast. Mastectomy was indicated mainly because it was the patient's choice. As suggested, since the first diagnosis of B3 lesion and after that of ductal carcinoma in situ, the patient did not accept chemoprevention. It should be noted that risk-reducing mastectomy is cited only rarely for prevention in cases of even recurrent and multicentric premalignant lesions as in this case.

Keywords: Breast cancer; B3 lesion; breast carcinoma, ductal atyipical hiperplasya

APPROVED PAPERS FOR POSTER

PRIMARY INVASIVE DUCTAL CARCINOMA OF AXILLARY ACCESSORY BREAST

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Primary accessory breast cancer is an extremely rare pathology, representing less than 1% of all breast cancers, and it is found in more than 90% of cases in the axilla. The diagnosis of accessory axillary breast cancer (AABC) is often late and at an advanced stage with an average delay of 40.5 months. Histological sampling and immunohistochemical results confirm the diagnosis. Most patients are diagnosed with stage II disease or higher, so it is considered to have a poor prognosis. There is no proper management for AABC; it follows the guidelines for orthotopic pectoral breast cancer. We therefore report the case of a 50-year-old woman diagnosed with grade II invasive ductal carcinoma found in accessory axillary breast, treated with neoadjuvant chemotherapy followed by wide local resection and axillary lymph node dissection.

Keywords: Breast carcinoma, accessory breast, invasive ductal carcinoma, Breast surgery, Case report.

DUCTAL IN SITU ARISING IN FIBROADENOMA OF THE BREAST

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Fibroadenomas are common benign tumors of the female breast. In the appropiate clinical treatment, they are managed without excision, rarely a carcinoma arising within a fibroadenoma. We presented the case of a ductal carcinoma in situ (DCIS) arising in a fibroadenoma. We present a case of a 62 years old woman with a isolated lump, no palpable, in her right breast that underwent a core biopsy and histological finds of the lesion revealed a DCIS within a fibroadenoma. After four years without realizes mammography, by screening, she makes mammography and ultrasound with caracterized as ACR Birads categoria 4 - in 2021. The matologists should be aware of the possibility, particularly in older women, to inform the rationale for prompt surgical evaluation and follow up of all breast masses.
Mammography revelead a 1,4 centimeter mass in the right upper outer without microcalcifications.A ultrsound revealed a solid mass, hipoecoic, 1,4x0,7x1,1 centimeters, microlulated. An core biopsy showed showed a bifassic neoplasia (fibroepitelial): a diagnostic sugestive of fibroadenoma with a colonization por DCIS, cribriform, high grade, measuring 2 mm.
Immunohistochemistry: ER: POSITIVE: 90-100%. PR: 90-100%.
CerbB-2/Her2-neu score 0: negative.
Lumpectomy: all margins greater than 2,0 mm:
HYALINIZED FIBROADENOMA WITH USUAL DUCTAL HYPERPLASIA (06x04mm)
SCLEROSANT ADENOSIS
ALTERATIONS AND HYERPLASIA OF COLUMNAR CELS.
Questions:
1. benefit from radioation therapy.
2. value of tamoxifem or aromatase inibitor.
3. surveillance and follow-up

Keywords: Breast cancer, Ductal carcinoma in situ, fibroadenoma

APPROVED PAPERS FOR POSTER

PRIMARY ANGIOSARCOMA OF THE BREAST: A CASE REPORT

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A 39-years- old woman, presented to our mastology session, with complaints of a right breast lump in 2014, wich had grown very slowly and changed in colour over the past year (purple). On physical examination, the was found in 12-1 o'clock position, bruise-like and soft-to- firm in consistancy (Figure 1). On mammography, the lump presented difuse - dense and ultrassonography showed ill-defined mass and and poor delimited hyperecogenic infiltration in the upper inner posrtion of the right breast that measured about 7 cm in size. A core biopsy was perfomed in the suspecious lesion. The pathologic result was necrotic breast tissue. A second core biopsy was perfomed with the diagnosis of malignant neoplasia poorly differentiated. The immunohistochemestry was diagnosed moderate-differentiated angiosarcoma. A modified mastectomy was perfomed and the initial diagnostic confirmed. After that, she received adjuvant chemotherapy. But the treatment was interrrupted due to epístaxis, hematemesis and body paresthesias. After this, it was observed progression of the disease with metastasis in: lungs, stomach, mounth, gum and brain. She was subjected tp palliative treatment and died in november-2015.Discussion Primary angiosarcoma of the breast is a very rare disease and correspond to less than 1% of the breast malignancies. Mammary angiosarcoma should be differentially diagnosed from benign hemangiomas, phyllodes sarcomas, stromal sarcomas, metaplastic carcinomas, fibrosarcomas, liposarcomas, squamous cell carcinomas with sarcomatoid features, myoepitheliomas, fibromatoses, and reactive spindle cell proliferative lesions. CD31 is a sensitive marker for this class of cancers, and CD34 positively ranges from 40% to 100%. These markers could help the accurate diagnosis of angiosarcoma. Pathologically, these tumors are divided in three groups according to the classification proposed by Donnel et al. Well differentiated (grade I) tumors consist of anastomosing vascular channels that invade the surrounding breast tissue. Moderate differentiated (grade II) tumors have more solid neoplastic vascular growth and an increased mitotic rate. Poorly differentiated (grade III) lesions have obvious sarcomatous areas, and areas of necrosis, hemorrhage, and infarction. In conclusion, primary mammary angiosarcoma is a rare neoplasm of the breast that affects a younger female population, compared to breast carcinomas, and has aggressive clinical behavior. Difficult differential diagnoses, due to atypical characteristics, can delay management.

Keywords: Angiossarcoma, angiossarcoma primário de mama

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