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Programa de Residência Médica em Oncologia Clínica

MATHEUS FERES DE MELO

ANÁLISE DO PERFIL DAS PACIENTES JOVENS, ATÉ 40 ANOS DE IDADE, COM CÂNCER DE MAMA

Rio de Janeiro
2025

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Trabalho de Conclusão de Curso apresentado ao Instituto Nacional de Câncer como requisito parcial para a conclusão do Programa de Residência Médica em Oncologia Clínica

Orientador: Dr. Alexandre Boukai

Revisão: Dra. Shirley Burburan

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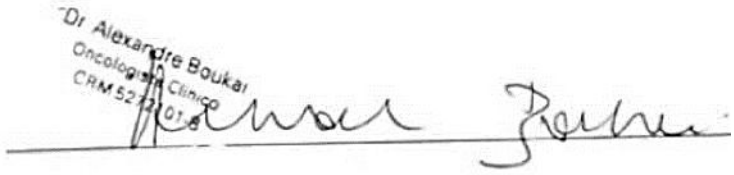
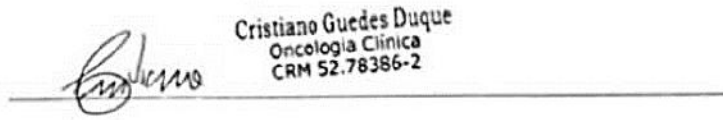


Alexandre Boukai



Cristiano Guedes Duque

Rio de Janeiro

2025

RESUMO

DE MELO, Matheus Feres. **Análise do perfil das pacientes jovens, até 40 anos de idade, com câncer de mama.** Trabalho de Conclusão de Curso (Residência Médica em Oncologia Clínica) — Instituto Nacional de Câncer (INCA), Rio de Janeiro, 2025.

O câncer de mama em mulheres com 40 anos ou menos configura um subgrupo associado a maior agressividade biológica e pior prognóstico, justificando sua caracterização específica. Este estudo teve como objetivo descrever o perfil epidemiológico, clínico-patológico e terapêutico de mulheres jovens com câncer de mama atendidas em um centro oncológico público no Rio de Janeiro. Trata-se de estudo observacional retrospectivo envolvendo pacientes de 18 a 40 anos diagnosticadas entre outubro de 2022 e outubro de 2023. No período, 75 das 1.321 pacientes registradas (5,7%) apresentavam idade ≤40 anos, com mediana de 37 anos e predominância de mulheres não brancas. Observou-se frequência elevada de histórico familiar de câncer de mama. O carcinoma invasivo de tipo não especial foi o subtipo predominante, e grande parte das pacientes apresentava tumores de alto grau e Ki-67 elevado. Quanto ao estadiamento clínico, identificou-se proporção significativa de tumores T3 e T4, além de comprometimento linfonodal expressivo e presença de casos metastáticos ao diagnóstico. Entre as pacientes em estádios I–III, a maioria recebeu quimioterapia neoadjuvante, seguida de tratamento cirúrgico, com maior frequência de mastectomia. Entre aquelas submetidas à mastectomia, parte não realizou reconstrução mamária. O intervalo mediano entre o diagnóstico e o início do tratamento foi superior ao ideal, refletindo limitações estruturais do sistema público. Em conjunto, os achados evidenciam alta carga de doença avançada e características biológicas mais agressivas nesse grupo etário. Esses resultados reforçam a importância de estratégias contínuas para aprimorar as etapas de cuidado e oferecer suporte adequado a essa população.

Palavras-chave: neoplasias da mama; adulto jovem; epidemiologia clínica; prática de saúde pública; acessibilidade aos serviços de saúde.

ABSTRACT

DE MELO, Matheus Feres. **Analysis of the profile of young patients, up to 40 years of age, with breast cancer.** Final Paper (Medical Residency in Clinical Oncology) — Brazilian National Cancer Institute (INCA), Rio de Janeiro, 2025.

Breast cancer in women aged 40 years or younger constitutes a subgroup characterized by greater biological aggressiveness and poorer prognosis, underscoring the relevance of its specific characterization. This study aimed to describe the epidemiological, clinicopathological, and therapeutic profile of young women with breast cancer treated at a public oncology center in Rio de Janeiro. This was a retrospective observational study involving patients aged 18 to 40 years diagnosed between October 2022 and October 2023. During the study period, 75 of the 1,321 registered patients (5.7%) were aged ≤40 years, with a median age of 37 years and predominance of non-white women. A high frequency of family history of breast cancer was identified. Invasive carcinoma of no special type was the predominant histological subtype, and most patients presented high-grade tumors and elevated Ki-67 indices. Regarding clinical staging, a substantial proportion of T3 and T4 tumors was observed, along with significant lymph node involvement and the presence of metastatic disease at diagnosis. Among patients with stage I–III disease, most received neoadjuvant chemotherapy followed by surgical treatment, with mastectomy being more frequent than breast-conserving surgery. Among those undergoing mastectomy, a considerable number did not undergo breast reconstruction. The median interval between diagnosis and treatment initiation exceeded the recommended timeframe, reflecting structural limitations within the public healthcare system. Overall, the findings demonstrate a high burden of advanced disease and biologically aggressive tumor characteristics in this age group. These results reinforce the importance of continuous strategies to optimize care pathways and provide adequate support to this population.

Keywords: breast neoplasms; young adult; clinical epidemiology; public health practice; health services accessibility.

A Portrait of Young Women with Breast Cancer in a Public Cancer Center in Rio de Janeiro: A Retrospective Study

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INTRODUCTION

Breast cancer in women aged 40 years or younger is often associated with aggressive biological features and poorer outcomes. In resource-limited settings, such as many low- and middle-income countries, systemic barriers may impact care. Although Brazil faces such challenges, specific data on this population remain scarce.

OBJETIVES

To describe the epidemiological, clinicopathological characteristics and treatment approaches among young women with breast cancer.

METHOD

Retrospective observational study including women aged 18–40 years with breast cancer registered at a public cancer center in Rio de Janeiro, Brazil, between October 2022 and October 2023. Data were collected from medical records.

RESULTS

Table 1. Clinicopathological characteristics of young women (≤40 years old) diagnosed with breast cancer at the National Cancer Institute (INCA-RJ, Brazil).

Variable	No. (%) n = 75	Variable	No. (%) n = 75	Variable	No. (%) n = 75
All Cohort	75 (100%)	**Histology** No special type Lobular Other subtypes	 62 (82,4%) 4 (5,4%) 9 (12,2%)	**KI67** ≥ 20% < 20%	 66 (87,5%) 9 (12,5%)
Age (average, years)	37	**Histologic Grade** G1 G2 G3	 3 (4,2%) 51 (68,1%) 21 (27,8%)	**Estrogen Receptor (ER)** Positive	 56 (74,3%)
Race Non-white White	 51 (68%) 24 (32%)	**Clinical Stage (AJCC 8th ed.):** S. I S. II S. III S.IV	 5 (6,7%) 29 (38,7%) 26 (34,7%) 15 (20%)	**Progesterone Receptor (PR)** Positive	 50 (66,2%)
Family History Breast Ovarian	 34 (45,3%) 4 (5,3%)	**Tumor** T1 T2 T3 T4	 6 (8,1%) 23 (31,1%) 19 (25,7%) 26 (35,1%)	**HER2:** Positive	 21 (27,4%)
Pregnancy at the time of diagnosis	4 (5,3%)	**Nodal** N0 N1 N2 N3	 31 (41,3%) 28 (37,3%) 12 (16%) 4 (5,3%)	**Triple Negative**	13 (17%)

Legend G- Grade; S- Stage; AJCC – American Joint Committee on Cancer; ER – Estrogen Receptor; PR – Progesterone Receptor; HER2 – Human Epidermal Growth Factor Receptor 2; TN – Triple Negative; Ki67 – Cell Proliferation Marker Ki-67; NST – No Special Type.;

RESULTS

Table 2. Treatment – patients with stages I to III

Variable	No. (%) n=60	Variable	No. (%) n=50
Cohort Stage I to III	 60 (100%)	**Surgery** Mastectomy Conserving	50 (100%) 33 (67.3%) 17 (32%)
Neoadjuvant Chemoterapy Yes No	 47 (78,3%) 13 (21,7%)	**Axillary Approach** Axillary dissection SLNB	50 (100%) 19 (38.4%) 31 (61.6%)
Adjuvant Chemoterapy Yes No	 6 (10%) 54 90%)	**Breast Reconstruction** Yes No	 16 (45.8%) 19 (54.2%)

Legend: SLNB- Sentinel lymph node biopsy.

Table 3. Median Time to Treatment

Variable	No. (%) n=75
All Cohort	75 (100%)
Time from diagnosis to treatment initation	105 days

Among 1,321 patients registered at the Breast Cancer Department during the study period, 75 (5.7%) were aged ≤40 years. Median age was 37 years; 68% were non-white. Family history of breast cancer was reported in 45.3%, and 5.3% had family history of ovarian cancer. Pregnancy at the time of diagnosis occurred in 5.3%. Invasive carcinoma of no special type was the most frequent histological subtype (82.4%), followed by other subtypes (12.2%) and lobular carcinoma (5.4%). Histologic grade: 4.2% grade 1, 68.1% grade 2, 27.8% grade 3. Clinical Stage (AJCC 8th ed.): I: 6.7%, II: 38.7%, III: 34.7%, IV: 20%. T classification: T1: 8.1%, T2: 31.1%, T3: 25.7%, T4: 35.1%. Nodal status: N0: 41.3%, N1: 37.3%, N2: 16%, N3: 5.3%. High Ki-67 (≥20%) in 87.5%. ER and PR were positive in 74.3% and 66.2%, respectively; HER2 positivity (IHC 3+ or FISH+) in 27.4%; 17% were triple-negative.

Among 60 stage I–III patients, 78.3% had neoadjuvant chemotherapy. Surgery was performed in 86.7% of patients, with 67.3% undergoing mastectomy and 32.7% breast-conserving surgery. Among those who underwent mastectomy, 54.2% did not have breast reconstruction. Sentinel lymph node biopsy was performed in 61.6%, axillary dissection in 38.4%. In our cohort, median time from diagnosis to treatment initiation was 105 days.

CONCLUSIONS

Young women with breast cancer registered at a public cancer center in Rio de Janeiro, Brazil, appear to present with advanced-stage disease, high-grade tumors, elevated Ki-67, and lymph node involvement. A considerable proportion did not undergo breast reconstruction following mastectomy. These findings underscore the need for targeted efforts to improve care delivery and address the specific needs of this population.

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Certificamos que,

o trabalho intitulado:

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dos autores **Matheus Feres de Melo, Alexandre Boukai**

foi apresentado por **Matheus Feres de Melo** no **XXVI Congresso Brasileiro de Oncologia Clínica**,

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Rio de Janeiro, 11/11/2025

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