



**Ministério da Saúde
Instituto Nacional de Câncer
Coordenação de Ensino
Programa de Residência Médica em Oncologia Clínica**

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**CLINICOPATHOLOGICAL PROFILE AND OUTCOMES OF ELDERLY
EARLY-STAGE BREAST CANCER PATIENTS WITH 75 YEARS OR OLDER:
SERIE FROM NATIONAL CANCER INSTITUTE – BRAZIL**

**Rio de Janeiro
2024**

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CLINICOPATHOLOGICAL PROFILE AND OUTCOMES OF ELDERLY EARLY-STAGE BREAST CANCER PATIENTS WITH 75 YEARS OR OLDER: SERIE FROM NATIONAL CANCER INSTITUTE – BRAZIL

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

Orientadora: Prof^a. Dra. Susanne Crocamo

Revisão: Prof^a. Dra. Shirley Burburan

Rio de Janeiro

2024

C933c Pereira, Sabrina Cristofaro Maciel.

Clinicopathological profile and outcomes of elderly early-stage breast cancer patients with 75 years or older. Serie from National Cancer Institute — Brazil. / Sabrina Cristofaro Maciel Pereira. — Rio de Janeiro, 2024.

11 f.. il. color

Trabalho de Conclusão de Curso (Programa de Residência Médica em Oncologia Clínica) — Instituto Nacional de Câncer, 2024.

Orientador(a). Prof^ª. Dra. Susanne Crocamo.

Revisor(a): Prof^ª. Dra. Shirley Burburan.

1. Neoplasias da Mama 2. Idoso. 3. Terapêutica. 4. Prognóstico. I. Crocamo, Susanne. (Orient). II. Burburan, Shirley. (Rev). III. Instituto Nacional de Câncer. IV. Título.

CDD 617.994 49 075

Catálogo na fonte
Núcleo de Sistema Integrado de Bibliotecas / INCA
Katia Simões CRB7/5952


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Clinicopathological profile and outcomes of elderly early-stage breast cancer patients with 75 years or older: serie from National Cancer Institute – Brazil


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Aprovado em: 26 de junho de 2024


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Rio de Janeiro

2024

Este trabalho é dedicado
a todos os educadores e médicos do INCA que,
ao longo dos anos, trabalham para manter o alto
nível de excelência desta instituição.

AGRADECIMENTOS

Agradeço à Prof^a. Dra.
Susanne Crocamo por ter aceitado me
acompanhar neste projeto. O seu empenho e
perspicácia foram essenciais para a minha
motivação e interesse pela ciência durante o
longo percurso de formação acadêmica.

“Você não pode esperar construir um mundo melhor sem melhorar os indivíduos. Para esse fim, cada um de nós deve trabalhar para o seu próprio aperfeiçoamento e, ao mesmo tempo, compartilhar uma responsabilidade geral por toda a humanidade”.

Marie Curie

RESUMO

PEREIRA, Sabrina Cristofarao Maciel. **Perfil clinicopatológico e desfechos de pacientes com 75 anos ou mais com câncer de mama em estágio inicial:** Série de casos do Instituto Nacional do Câncer – Brasil. Trabalho de Conclusão do Curso (Residência Médica em Oncologia) — Instituto Nacional de Câncer (INCA), Rio de Janeiro, 2024.

Introdução: Pacientes com câncer de mama acima de 75 anos representam uma população heterogênea, muitas vezes não incluída em ensaios clínicos. Embora a decisão do tratamento não deva ser orientada pela idade, mas sim pela aptidão física, os pacientes idosos foram historicamente tratados de forma distinta dos pacientes mais jovens. **Objetivo:** Este estudo teve como objetivo determinar o perfil clinicopatológico e os resultados de sobrevida de pacientes com câncer de mama inicial com 75 anos ou mais. **Métodos:** De 1º de janeiro de 2012 a 31 de dezembro de 2015, dados demográficos, características clínicas basais, patologia e detalhes do tratamento foram extraídos retrospectivamente dos prontuários médicos para um banco de dados eletrônico. As variáveis qualitativas foram descritas por frequências absolutas e relativas. A sobrevida livre de doença em 5 anos foi calculada pelo método de Kaplan Meier e as curvas de sobrevida global foram comparadas pelo teste log rank usando 5% como nível de significância. **Resultados:** Um total de 252 pacientes elegíveis para BC foram incluídos. A mediana de idade foi de 80,2 anos, a maioria dos pacientes 78,7% apresentava performance status ECOG 0 ou 1, 65,1% eram brancos. Ao diagnóstico, 28,8% dos pacientes apresentavam estágio clínico (EC) I, 43,1% apresentavam EC II, 28% apresentavam EC III. Histologicamente, 76,6% tinham CDI, 6,3% tinham CLI, carcinoma in situ lobular/ductal 1,2%, outros 16,3%. Tumores de grau intermediário e alto representaram 67,5% e 15,1%, respectivamente. A maioria era positiva para receptores hormonais (89,6%) e HER2 estava superexpresso em 6,7%, mas em 21,8% o status de HER2 era desconhecido. Pacientes submetidas à mastectomia representaram 45,8% dos casos, 20,3% receberam quimioterapia neo/adjuvante e 73,8% receberam terapia hormonal. Num seguimento médio de 60 meses, a recorrência locoregional ocorreu em 5,2% dos casos, 6,7% dos pacientes desenvolveram metástases à distância e 24,2% morreram. **Conclusão:** Pacientes com 75 anos ou mais apresentavam doença mais avançada ao diagnóstico, sem apresentar performance status ruim. A maioria fez cirurgia primária de mama. A terapia hormonal adjuvante foi o tratamento de escolha devido à boa tolerância neste grupo. Estratégias para melhorar o rastreamento do câncer de mama e o tratamento adequado neste subgrupo de pacientes idosas devem ser implementadas, tendo em conta o aumento da expectativa de vida da nossa população e as diferenças entre a idade cronológica e biológica.

Palavras-Chave: câncer de mama; paciente idoso; tratamento; prognóstico.

ABSTRACT

PEREIRA, Sabrina Cristofaro Maciel. **Clinicopathological profile and outcomes of elderly early-stage breast cancer patients with 75 years or older:** serie from National Cancer Institute – Brazil. Final paper. (Medical Residency in Clinical Oncology) – Brazilian National Cancer Institute (INCA), Rio de Janeiro, 2024.

Background: Breast cancer patients above 75 years old represent an heterogenous population, often not included in clinical trials. Although treatment decision should not be guided by age but fitness, elderly patients were historically treated distinctly than younger patients. **Objective:** This study aimed to determine the clinicopathological profile and survival outcomes of early breast cancer patients 75 years or older. **Methods:** From January 1st, 2012 to December 31st, 2015, demographics, baseline clinical characteristics, pathology, and treatment details were retrospectively extracted from medical records to an electronic database. Qualitative variables were described by absolute and relative frequencies. **Results:** A total of 252 BC eligible patients were included. The median age was 80.2 years, most patients 78,7% had ECOG performance status 0 or 1, 65,1% were white. At diagnosis, 28.8% of patients had clinical stage (CS) I, 43.1 % had CS II, 28% had CS III. Histologically, 76.6% had IDC, 6.3% had ILC, in situ carcinoma lobular/ductal 1.2%, others 16.3%. Intermediate and high-grade tumours represented 67.5% and 15.1%, respectively. The majority were hormone receptor positive (89.6%) and Her2 was overexpressed in 6.7%, but in 21.8% Her2 status in unknown. Patients underwent mastectomy in 45.8% of cases, 20.3% were offered neo/adjuvant chemotherapy and 73.8% received hormone therapy. At a median follow-up of 60 months, locoregional recurrence occurred in 5.2% of cases, 6.7% of patients developed distant metastases and 24.2% died. **Conclusion:** Patients 75 years or older had more advanced disease at diagnosis without having a poor performance status. Majority had primary breast surgery. Adjuvant Hormone Therapy was the treatment of choice due to good tolerance in this group. Strategies to improve breast cancer screening and the proper treatment, among patients, should be implemented taking into account the elderly population lifespan and differences between chronological and biological age.

Keywords: breast cancer; elderly patient; treatment; prognosis.



CLINICOPATHOLOGICAL PROFILE AND OUTCOMES OF ELDERLY EARLY-STAGE BREAST CANCER PATIENTS WITH 75 YEARS OR OLDER: SERIE FROM THE NATIONAL CANCER INSTITUTE – BRAZIL

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BACKGROUND

Breast cancer patients above 75 years old represent a heterogeneous population, often not included in clinical trials. Although treatment decision should not be guided by age but fitness, elderly patients were historically treated distinctly than younger patients.

OBJECTIVES

This study aimed to determine the clinicopathological profile and survival outcomes of early-stage breast cancer patients 75-years or older.

METHODS

From January 1st, 2012 to December 31st, 2015, demographics, baseline clinical characteristics, pathology, and treatment details were retrospectively extracted from medical records to an electronic database. Qualitative variables were described by absolute and relative frequencies. Disease free survival in 5 years was calculated by Kaplan Meier method and overall curves were compared by log rank test using 5% as significance level.

RESULTS

A total of 252 BC eligible patients were included. Patient characteristics can be seen in table 1 and tumor characteristics in table 2. Clinical staging was significantly associated with DFS in the group 1 (PS 0-1) and group 2 (PS =2), where higher clinical staging is associated with worse DFS regardless of the systemic treatment (Figure 1 and 2).

On the other hand, and taking into account the small number of patients on the group 2, worse performance status was associated with worse DFS in patients with the same clinical staging. For instance, DFS at 5-years follow-up of patients with stage I, II and III was respectively for group 1 was 100%, 89.9% and 70% (p<0.001) and for group 2 was 83.3%, 90.9%, 57.7% (p=0.024), which suggests that PS was prognostic for elderly women as known for younger women.

PS also seems to be prognostic for systemic therapy, where DFS at 5-years follow-up with exclusively hormonal-therapy and chemotherapy respectively for group 1 was 91.9% and 78.9% (p=0.023) and for group 2 was 72.7% and 55.6% (p=0.327) (Figure 3 and 4).

Table 1 – Patients characteristics at baseline

Characteristics	n = 252
N (%)	
Age, mean (range), y	75-93 (79)
Race, N, (%)	
White	164 (65.1)
Black	34 (13.9)
Others	54 (21.4)
PS, N, (%)	
0-1	196 (77.8)
≥2	44 (17.2)
Not done	12 (4.8)
Type of Surgery, N, (%)	
Radical Mastectomy	120 (47.6)
Conservative Surgery	80 (31.7)
Not done	52 (20.6)
Radioterapy, N, (%)	
No	115 (45.6)
Yes	97 (38.5)
Not done	40 (15.9)
Systemic Treatment, N, (%)	
Chemotherapy	51 (20.2)
Hormone therapy (exclusive)	189 (76.1)
Not done	12 (4.8)

Table 2 – Tumor characteristics at baseline

Characteristics	n = 252
Characteristics	
AJCC stage, N, (%)	
I/A	67 (26.6)
I/B	4 (1.6)
II/A	80 (31.7)
II/B	26 (10.3)
III/A	29 (11.5)
III/B	35 (13.9)
Histology, N, (%)	
Invasive Ductal	192 (76.2)
Invasive Lobular	16 (6.3)
Others	44 (17.5)
Histologic grade, N, (%)	
1	32 (12.7)
2	170 (67.3)
3	38 (15.3)
Not done	12 (5.7)
HER2, N, (%)	
Positive	17 (6.8)
Negative	180 (71.4)
Not done	55 (21.8)
Hormone receptor, N, (%)	
Positive	223 (88.5)
Negative	26 (10.3)
Not Done	3 (1.2)

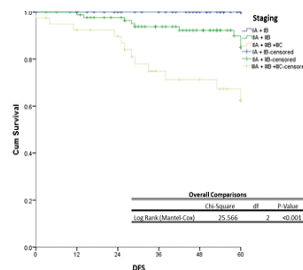


Figure 1- Cumulative survival free of disease rate for patients with PS 0 and 1, distributed by stage

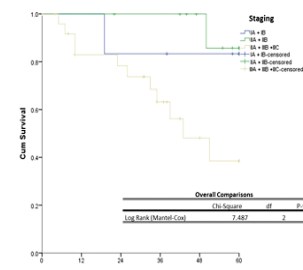


Figure 2- Cumulative survival free of disease rate for patients with PS ≥2, distributed by stage

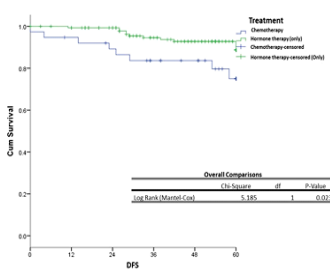


Figure 3- Cumulative Survival free of disease rate for patients with PS 0 and 1, by type of systemic treatment.

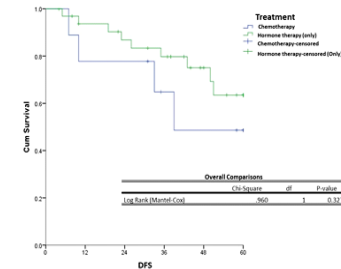


Figure 4- Cumulative Survival free of disease rate for patients with PS ≥2, by type of systemic treatment.

CONCLUSIONS

This population of patients = 75 years had more advanced breast cancer at diagnosis, but not necessarily having a poor performance status. Majority underwent to primary breast surgery. Adjuvant hormone therapy was the treatment of choice for this population and Performance status was a survival predictor despite of clinical staging or systemic treatment. Strategies to better select patients for systemic treatment, and eventually an adapted breast cancer screening, should be considered in the light of the continuous elongation of human lifespan.

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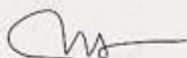
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dos autores: SABRINA; SUSANNE; BRUNO; CARLOS AUGUSTO; LUCIANA, foi apresentado na modalidade
Pôster, no evento XXIII Congresso Brasileiro de Oncologia Clínica ocorrido de 03 a 05 de novembro de 2022, no
Windsor Oceânico Hotel em Rio de Janeiro/RJ.

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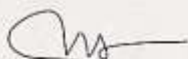
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foi apresentado na modalidade Pôster, por Sabrina Cristofaro Maciel Pereira, no evento XXIII Congresso Brasileiro
de Oncologia Clínica ocorrido de 03 a 05 de novembro de 2022, no Windsor Oceânico Hotel em Rio de Janeiro/RJ.

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