Approaches to Breast Cancer Risk Management in Ovarian Cancer (OC) Patients Harboring Germline BRCA1/2 Mutations (gBRCA1/2mut).

Debora Sousa[1], L. Soares[1], T. Saruwatari[1], A. Cicilini[1], J. Casali da Rocha[1], S. Sanches[1], A. Gadelha[1], F. Makdissi[2], G. Baiochi[2], B. Tirapelli[1], F. Leite[2], M. Sonagli[2], R. Cagnacci[2], S. Caputo Durand[3], A. Favarin[4], B. Rossi[4], G. Molin[4], A. da Costa[1], E. dos Santos[1]; [1]Clinical Oncology, A. C. Camargo Cancer Center, São Paulo, BRAZIL, [2]Surgical oncology, A. C. Camargo Cancer Center, São Paulo, BRAZIL, [3]Clinical Oncology, Institut Curie - Ensemble Hospitalier, Paris, FRANCE, [4]Clinical Oncology, Hospital Beneficência Portuguesa, São Paulo, BRAZIL.

Introduction

- Patients with germline BRCA1/2 mutations have an increased risk of breast cancer.
- Prolonged survival in ovarian cancer makes prevention increasingly relevant.
- Strategies include intensive surveillance, risk-reducing mastectomy, and chemoprevention.
- Objective: to describe strategies for managing breast cancer risk in patients with ovarian cancer who carry gBRCA1/2 mutations.

Methods and Materials

- A retrospective review of medical records was conducted for patients with OC and gBRCA1/2 mut, focusing on breast cancer risk reduction strategies.

Results

Eighty-eight patients with ovarian cancer and gBRCA1/2 mutations were identified.

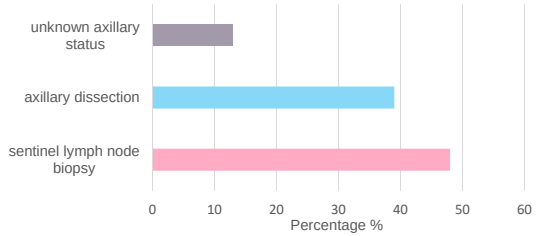
Table 1. Baseline characteristics of the patients.

Variable	N (%)
BRCA mutations	
BRCA 1	66 (75%)
BRCA 2	22 (25%)
Personal history of Breast Cancer	
Present	23 (26%)
Absent	65 (74%)
Family history of breast cancer	
Present	51 (58%)
Absent	37 (42%)
Ovarian cancer stage (FIGO)	
I-II	13 (14,8%)
III-IV	75 (85%)

Table 2. Breast surgical treatment among patients with a prior history of breast cancer (n = 23).

Procedure	n (%)
Lumpectomy	16 (18%)
Mastectomy	6 (26%)
Adenomastectomy	1 (4%)

Figure 1. Axillary management among patients with a prior history of breast cancer (n = 23).



After a median follow-up time of 70 months, only 12 patients (13%) underwent risk-reducing breast surgery:

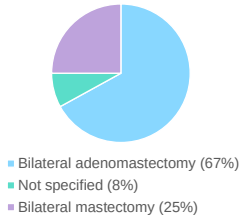
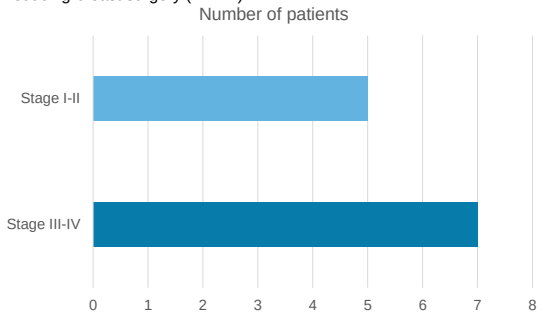


Figure 2. Risk-reducing breast surgery among patients (n = 12).

Figure 3. Ovarian cancer stage among patients undergoing risk-reducing breast surgery (n = 12).



Most patients (65%) opted for active surveillance every 6 months, with magnetic resonance imaging (MRI), ultrasound, and mammography:

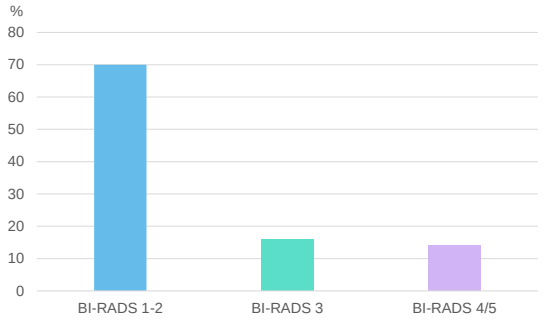


Figure 4. Imaging Findings During Surveillance

A total of 6 patients (10%) were ultimately diagnosed with breast cancer:

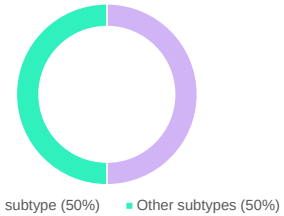


Figure 5. Breast Cancer Subtypes Among Diagnosed Patients (n = 6).

Stage	n (%)
IA	3 (50%)
IIA	2 (33%)
IIIA	1 (17%)

Table 3. Clinical stage of diagnosed breast cancers (n = 6).

Overall survival from the time of ovarian cancer diagnosis was 94.2 months.

Conclusions

In this cohort of OC patients with gBRCA1/2 mutations, most were monitored with imaging, and many showed suspicious findings that led to breast cancer diagnoses. These results underscore the need for individualized counseling and incorporating breast cancer prevention into the long-term care of ovarian cancer survivors with gBRCA1/2 mutations.

Contact

Debora Guilherme de Albuquerque Rodrigues de Sousa
A.C.Camargo Cancer Center
debora.gars2@Hotmail.com
+5583991597709

References

1. KUCHENBAECKER, K. B. et al. *Risks of breast, ovarian, and contralateral breast cancer for BRCA1 and BRCA2 mutation carriers*. JAMA, v. 317, n. 23, p. 2402–2416, 2017.
2. KRAJCHR, M. et al. *Risk-reducing strategies in BRCA1/2 mutation carriers: impact on mortality and cancer incidence*. Cancers, v. 16, n. 1, p. 103, 2024.
3. MARGULIES, A. G.; MORROW, P. K. *Management of hereditary ovarian cancer syndromes*. Obstetrics & Gynecology Clinics of North America, v. 48, n. 4, p. 739–754, 2021.
4. SAWOOQ, H. et al. *Combined MRI and mammography for breast cancer screening in BRCA mutation carriers: systematic review and meta-analysis*. The Breast, v. 44, p. 1–7, 2019.
5. EVANS, D. G. et al. *Management of breast cancer risk in BRCA1/2 mutation carriers*. The Breast, v. 52, p. 140–150, 2020.

This presentation is the intellectual property of the author/presenter. Contact them at <<your email address>> for permission to reprint and/or distribute.