Prophylactic Mastectomy Associated with Multiple Myeloma: A Case Report

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Abstract: Surgical treatment is the cornerstone in the management of invasive breast carcinoma. The evolution of therapeutic indications varies depending on tumor characteristics, with or without metastases. Surgery serves two main objectives in breast cancer:

- · Staging, in order to tailor adjuvant treatment.
- Locoregional control of the disease.

The multidisciplinary tumor board makes it possible to define the optimal therapeutic sequence, considering the patient's age, comorbidities, breast imaging, and pathological findings.

Keywords: Breast Cancer, Radical Mastectomy, Multiple Myeloma, Surgery.

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I. INTRODUCTION

Initially, the treatment of breast cancer was based on radical mastectomy. The principle of surgical management is to perform an *in sano* excision of the tumor and to assess the axillary status in order to guide adjuvant therapy [1].

The currently recommended procedure is the Patey-type radical mastectomy. After mastectomy, the recurrence rate on the chest wall ranges between 2% and 10% [2].

Most scientific societies recommend sentinel lymph node (SLN) biopsy in the following situations: T1–T2 unifocal or multifocal tumors, either before or after neoadjuvant chemotherapy [3].

The need for adjuvant treatment is particularly crucial in the management of apparently localized breast cancers, given that the risk of metastatic recurrence and disease-specific mortality, in the absence of systemic adjuvant therapy, is historically about 10% to 30% for patients without axillary lymph node involvement, and 30% to 80% in cases with axillary lymph node invasion [4].

II. OBSERVATION

A 49-year-old patient was presented with an ulcerated, exophytic breast mass of the right breast, in whom an incidental diagnosis of multiple myeloma was made during the staging workup.

> Clinical Examination:



Fig 1 View of The Actual Tumor During Clinical Inspection



Fig 2 Mammography



Fig 3 Macroscopic View of The Tumor

➤ Histological Examination:

- Invasive breast carcinoma
- Type non specified
- Grade 3
- Luminal A
- Her2 score 3+

III. DISCUSSION

Schematically, the indications for mastectomy are [5]: Large tumors, possibly after neoadjuvant chemotherapy Multifocal or multicentric lesions Extensive ductal carcinoma in situ In case of recurrence (invasive or in situ) Contraindications to radiotherapy that make conservative treatment insufficient (Li-Fraumeni syndrome, history of thoracic irradiation) Patient choice. Access to immediate breast reconstruction remains highly unequal across regions, as suggested by the *Variations in Surgical Practices in the Management of Breast Cancer in France*, published in March 2017 [6]. Involvement of the internal mammary chain and the upper axillary level (level III) lymph nodes is associated with a worse prognosis [7]. Radiotherapy can be performed after breast reconstruction [8].

IV. CONCLUSION

The therapeutic management of localized invasive breast cancers has evolved considerably over the past 10 years. Understanding the biological, genomic, and molecular mechanisms has allowed for placing these insights at the center of appropriate medical care.

➤ Ethics Committee Authorization:

Our institution does not find any conflict of ethics committee.

> Author Contribution:

Hassnaa Sarhane, Maha Lhaloui, Chaouki El Bied, Leila Rhilam: Performed Surgery, Paper Writing And Picture Editing. Amina Etber, Nisrine Benouicha, Aziz Baidada: Bibliography, Written Direction.

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REFERENCES:

- [1]. Volume 36 > n°3 > juillet 2021 http://dx.doi.org/10.1016/S0246-1064(20)42833-6
- [2]. Sakorafas GH. Breast cancer surgery—historical evolution, current status and future perspectives. Acta Oncol 2001;40:5–18.
- [3]. Vincent L, Margueritte F, Uzan J, Owen C, Seror J, Pouget N, et al. Synthèse des recommandations nationales et internationales concernant lesindications de la technique du ganglion sentinelle et du curage axillaire complémentaire après ganglion sentinelle positif dans la prise en charge des cancers du sein. Bull Cancer 2017;104:356–62.
- [4]. https://www.santepubliquefrance.fr/maladieset-traumatismes/cancers/cancer-du-sein/documents/rapport-synthese/estimations-nationales-de-l-incidence-et-de-la-mortalite-par-

https://doi.org/10.38124/ijisrt/25oct1315

- cancer-enfrance-metropolitaine-entre-1990-et-2018-volume-1-tumeurs-solidesetud.
- [5]. El-TamerM. Surgical options as quality of care indicatorsin breast cancer. J Surg Oncol 2009;99:393– 4.
- [6]. Or Z. Variations des pratiques chirurgicales dans la prise en charge des cancers du sein en France. 2017.
- [7]. Anonyme. Facteurs pronostiques de l'évolution de la maladie locorégionale ou métastatique et facteurs prédictifs de la réponse au traitement. Cancers du sein non métastatiques. Standards, Options et Recommandations. 1996. (FNCLCC)
- [8]. Balic M, Thomssen C, Würstlein R, Gnant M, Harbeck N. St. Gallen/Vienna 2019: a brief summary of the consensus discussion on the optimal primary breast cancer treatment. Breast Care 2019;14:103–10