A Challenging Diagnosis of a Patients with Synchronous Multiple Myeloma and Breast Cancer: A Case Report

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Introduction

- Multiple myeloma (MM) is a hematologic malignancy that is difficult to diagnose based on the presence of monoclonal proteins in serum/urine and the infiltration of plasma cells in the bone marrow. (1) (2)
- In addition, the presence of synchronous cancers also poses additional diagnostic challenges

Case presentation

- We present a 60-year-old female who presented in 2022 with severe neck pain and left cervical brachial neuralgia pain.
- In 2013, she was diagnosed with stage I breast cancer in the left breast. She was treated with surgery, radiotherapy, and maintenance therapy with hormone therapy .
- Due to persistent pain, she had a cervical MRI that showed a lesion on the C4, with an anterior epidural extension related to a tumoral epiduritis responsible for a moderate narrowing of the dural sac.
- PET CT imaging revealed lesions on the C3/C4/C6 and hypermetabolic orbital lesion with suspicion of metastatic breast cancer.
- Initiation with steroids and morphine to control her pain while waiting for a decision on radiotherapy in case metastatic breast cancer was detected. A biopsy of her bone lesion showed no metastatic breast cancer.
- Further investigations revealed the presence of pic IgG kappa.
- Blood test analysis showed no crab signs with albumin 46 g/L B2M 2.59 and IgG KAPPA 230 and Lambda 6.36.
- A rereading of the bone biopsy was consistent with 17 % of plasmocytes.
- The immunohistochemistry study showed CD38+ and Kappa +.
- The patient was first treated for breast cancer, then presented with MM. The treatment plan included DVD 6, followed by auto-transplantation.

Discussion

- This case report describes a rare case with Synchronous Multiple Myeloma and Breast Cancer
- In this case report, although lytic multiple lesions were first thought to be related to breast cancer
- Many papers have described synchronous solid tumors and MM mainly discovered on whole body scan. In this context, it is highly challenging to relate bone lytic lesions to either MM or tumor metastasis.(3) (4)
- A case of MM that may have been caused by breast cancer treatment, which might have suppressed plasmocyte proliferation, delaying the diagnosis

Conclusions

- Our case of a 60 year-old female with Synchronous Multiple Myeloma and Breast Cancer is quite unique and warrants to be reported.
- The patient was first treated for breast cancer, then presented with MM. The treatment plan included DVD 6, followed by auto-transplantation
- Increasing awareness among clinicians and pathologists that the clinical and radiologic suspicion of MM may be found within the spectrum of a second primary malignancy
- Monitor for signs of disease progression .
- Further studies are needed to investigate the etiopathogenesis of these associations between MM and Breast cancer .

References

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