

**VERTEBRAL METASTASIS IN A CASE OF CARCINOMA BREAST CLINICALLY
STAGE IA: A RARE FINDING**

¹*Dr. Anand, ²Dr. Ravishwar Narayan MBBS DNB (Nuclear Medicine) and ³Dr. Ghanish Kumar Panjwani MBBS DNB (Surgical Oncology)

Astt.Professor. Dept of Biochemistry. Shri Ramkrishna Institute of Medical sciences and Sanaka Hospital Durgapur West Bengal.

*Corresponding Author: Dr. Anand

Astt.Professor. Dept of Biochemistry. Shri Ramkrishna Institute of Medical sciences and Sanaka Hospital Durgapur West Bengal.

Article Received on 12/04/2017

Article Revised on 03/05/2017

Article Accepted on 24/05/2017

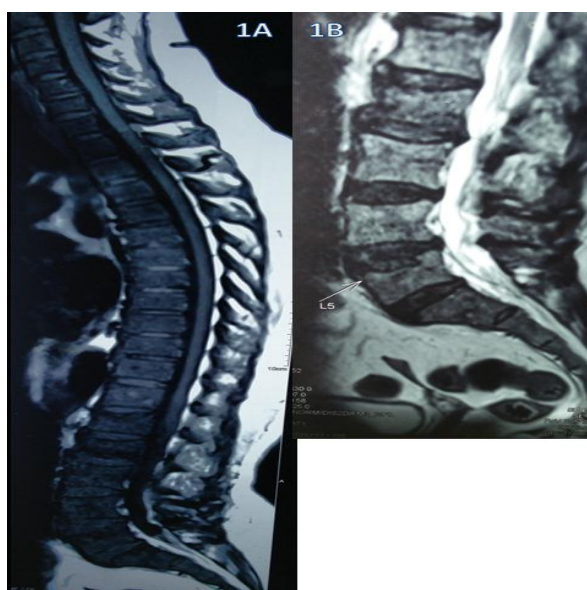
INTRODUCTION

Breast cancer is overall the most common cancer in females. It accounts for 08.4-31.5 % of total cancer incidence in females.^[1] In western countries breast cancer is most commonly diagnosed in local stage (I)^[2], however in India it mostly presents as stage III/IV.^[3] These patients usually present with breast lump which may or may not be tender, nipple discharge and / or nipple retraction. We present a case who presented with back pain and on further evaluation diagnosed to be a case of breast cancer with bone metastases with no involvement of nodes or any other organs.

CASE REPORT

A 55 years old female with no history of addiction and no family history of carcinoma presented with complains of low back ache of 6 months duration. MRI - Lumbo Sacral spine was done and raised suspicion of myeloproliferative disease (FIG: 1). Serum protein electrophoresis was negative for M – band spike, ruling out Multiple Myeloma. Bone marrow biopsy and immuno-histochemistry showed “metastatic carcinoma,

likely adenocarcinoma” (FIG: 2). Mammography showed a tiny (< 1 cm) BIRADS category 4 lesion in right breast while left breast was normal (FIG: 3). USG guided FNAC was performed and it showed Atypical Ductal hyperplasia. USG guided biopsy showed Infiltrating Duct Cell carcinoma - Grade II (FIG: 4) which was ER positive, PR negative and Her 2neu FISH positive. Metastatic workup showed only bone metastasis.



Sagittal view of whole spine screening (FIG:1A and T2 weighted image of lumbo-sacral spine (FIG:1B) showing diffuse altered signal intensity in the vertebral bodies and sacrum with partial loss of height of L1, L2 and L5 vertebral bodies --- ? Myeloproliferative Disease

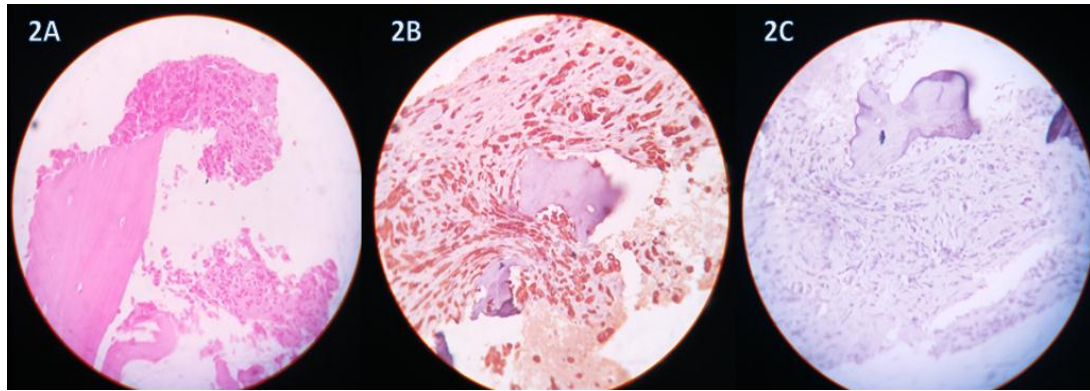


FIG2: Bone marrow biopsy and IHC sowed bony trabeculae, fibrosis with foci of markedly dysplastic epithelial cells showing glandular and trabecular pattern (FIG: 2A), CK 7 positivity (FIG: 2B) and CK 20 negativity (FIG: 2C). Findings were suggestive of metastatic carcinoma, likely adenocarcinoma

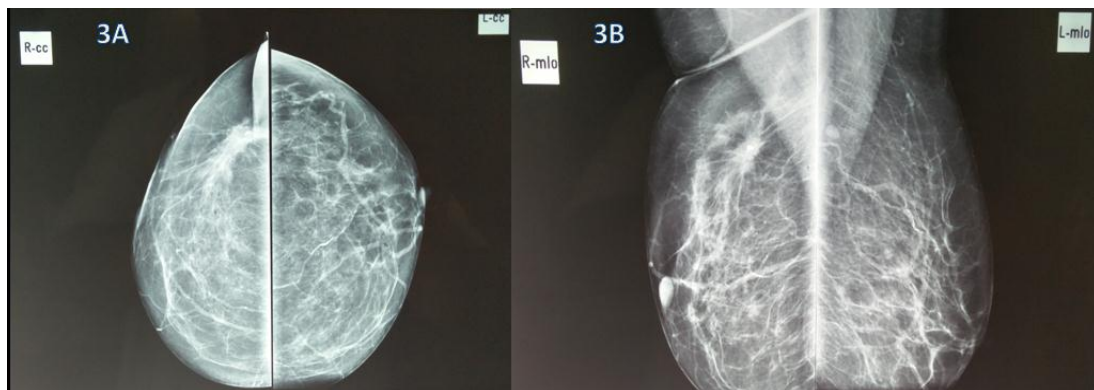


FIG : 3. CC (FIG 3A) and MLO (FIG 3B) views of mammogram show a tiny (<1 cm sized) BIRADS 4 lesion in right breast

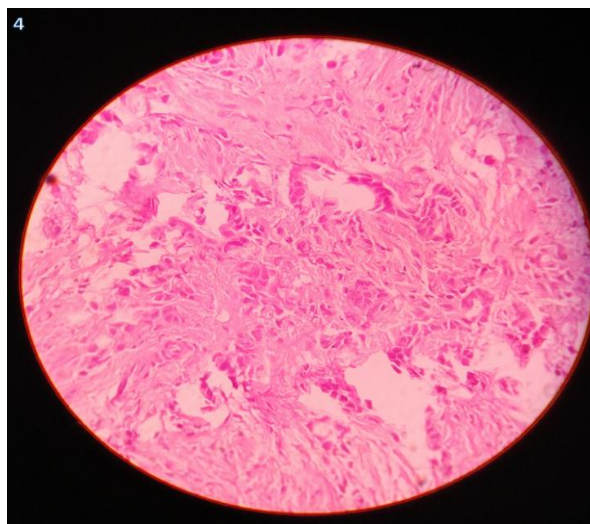


FIG : 4. Biopsy from breast lesion showed infiltrating duct cell carcinoma grade II

DISCUSSION

Bone-only metastatic breast cancer was first described in the 1970s and 1980s.^[4] Bone-only metastasis has been reported to occur in 0.5% - 3% of women at the time of diagnosis of breast cancer.^[5,6]

Features that are associated with metastatic disease in T1N0 breast cancer are young age, grade, lobular histology, hormone receptor negativity, Older age (>80) and black race.^[5]

REFERENCES

1. National cancer registry programme. Three-Year Report of Population Based Cancer Registries 2012-2014 [Internet]. bengaluru: NCDIR-NCRP(ICMR), 2016; 9-26. Available from: http://www.ncrpindia.org/ALL_NCRP_REPORTS/PBCR_REPORT_2012_2014/ALL_CONTENT/PDF_Printed_Version/Chapter2_Printed.pdf.
2. Cancer of the Breast (Female) - SEER Stat Fact Sheets [Internet]. Seer.cancer.gov. 2016 [cited 12 October 2016]. Available from: <http://seer.cancer.gov/statfacts/html/breast.html>
3. Kaur N, Attam A, Saha S, Bhargava S. Breast Cancer Risk Factor Profile in Indian Women. *JIMSA*, 2011; 24(4): 163-65.
4. Niikura N, Liu J, Hayashi N, Palla S. L., Tokuda Y., Hortobagy, G. N et al. Treatment Outcome and Prognostic Factors for Patients with Bone-Only Metastases of Breast Cancer: A Single-Institution Retrospective Analysis. *The Oncologist*, 2011; 16(2): 155-164. doi:10.1634/theoncologist.2010-0350.
5. Sherry MM, Greco FA, Johnson DH, Hainsworth JD. Breast cancer with skeletal metastases at initial diagnosis. Distinctive clinical characteristics and favorable prognosis. *Cancer*, Jul 1, 1986; 58(1): 178-82. PubMed PMID: 2423224.
6. Jensen AO, Jacobsen JB, Norgaard M, Yong M, Fryzek JP, Sorensen HT. Incidence of bone metastases and skeletal-related events in breast cancer patients: a population-based cohort study in Denmark. *BMC Cancer*, Jan 24 2011; 11: 29. doi:10.1186/1471-2407-11-29. PubMed PMID: 21261987; PubMed Central PMCID: PMC3037922.