

“RAINDROP SKULL” AS THE INITIAL MANIFESTATION OF CARCINOMA BREAST.-A CASE REPORT

Rajasekharan C^{1*} and Akhil Krishna²

¹Professor of Medicine, Department of Medicine, Medical College Hospital, Thiruvananthapuram-695011.

²Senior Resident, Department of Medicine, Medical College Hospital, Thiruvananthapuram-695011.

*Corresponding Author: Rajasekharan C

Professor of Medicine, Department of Medicine, Medical College Hospital, Thiruvananthapuram-695011.

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CASE REPORT

A 55 year old female was referred to the outpatient services for severe tiredness, loss of weight, bone pains, headache and low grade fever of 2 months duration with provisional diagnosis of multiple myeloma. Upon examination she was, pale, febrile with tenderness on multiple ribs. There was no axillary or other lymphadenopathy. Examinations of systems were unremarkable. Thyroid and breast were normal. Xray skull AP and lateral views revealed multiple, round, and purely lytic diffuse osteolytic "punchedout" lesions affecting the skull "raindrop skull" (figure.1.Panel.A,B)^[1] and the x-ray chest was showing the ribs multiple osteolytic lesions in the ribs. Liver function tests showed mild elevation of enzymes and alkaline phosphatase was 176u/litre and mildly deranged renal function tests. Urine bencejones proteins were negative and serum electrophoresis normal. Ultrasound scan abdomen, Computerised scan abdomen, chest, Oesophago gastroduodenoscopy, mammography were normal. Bone marrow revealed adenocarcinoma (figure.2.Panel.A). Magnetic Resonance Imaging (MRI) guided stereotaxic large core needle biopsy from a doubtful site on left breast showed infiltrating ductal carcinoma (figure.2.Panel.B).

MRI appears to be more sensitive than mammography in detecting tumors in women with an inherited susceptibility to breast cancer.^[2] Conventional mammographic imaging has a sensitivity range of only 50%-85% for malignant lesions.^[3] MRI could help improve the ability to diagnose ductal carcinoma in situ (DCIS), especially DCIS with high nuclear grade.^[4] Radiological appearance multiple milkman and

metastasis is difficult to distinguish and both can have camouflaging clinical presentations. Conventional mammographic imaging has a sensitivity range of only 50%-85% for malignant lesions.^[3] In a female presenting with multiple punched out lesions, metastasis from a breast carcinoma is the most likely diagnosis. MRI could help improve the ability to diagnose Ductal carcinoma in situ (DCIS), especially DCIS with high nuclear grade.^[4]

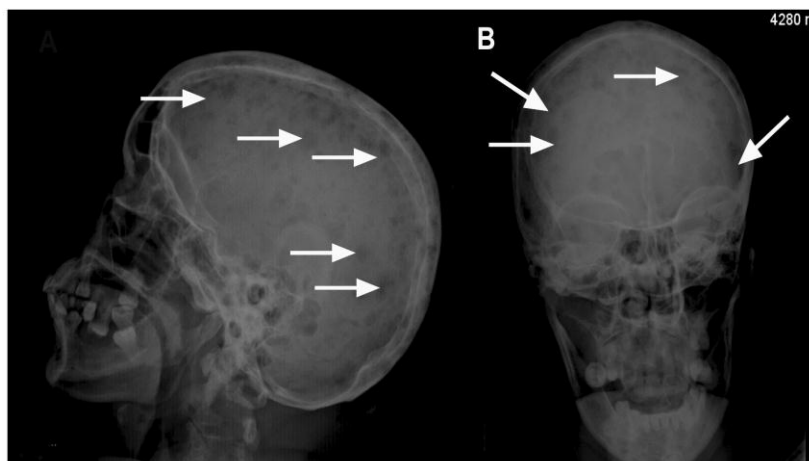


Figure:1. A. B. showing osteolytic punched out lesions affecting almost all over the calvaria.

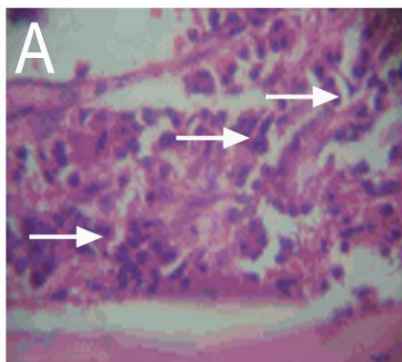


figure2.Panel.A. bone marrow showing adenocarcinoma (white arrows)

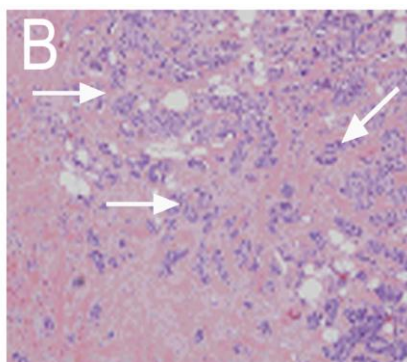


figure2.Panel B doubtful site on left breast showed infiltrating Ductal carcinoma in situ(DICS) (white arrows)

AUTHOR CONTRIBUTION

Author RC was responsible was the primary clinician involved in patient care. Both the authors Raced AK was responsible for taking the consent, editing and formatting the images drafting the caption and literature review.

Consent: All authors declare that “written informed consent” was obtained from the patient for publishing their images.

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Contribution of authors: RC was the Primary clinician under who investigated and planned strategies of management. AK was responsible for compilation of data writing, formatting and editing of manuscript. Collection of data and references.

1. The authors declare no competing interests.
2. The authors gives exclusive license granted to this publisher for publishing the manuscript.
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4. Patient consent form is obtained.
5. A written informed consent was taken for publishing and producing images.

REFERENCES

1. Yochum TR, Rowe LJ: Essentials of Skeletal Radiology, 3rd ed., Lippincott, Williams & Wilkins, Baltimore, Maryland, 2005.
2. Kriege M, Brekelmans CT, Bouts C, Besnard PE, Zonderland HM, Obdeijn IM, et al Efficacy of MRI and mammography for breast-cancer screening in women with a familial or genetic predisposition. *N Engl J Med*, 2004 Jul 29; 351(5): 427-37.
3. Moadel RM. Breast cancer imaging devices. *Semin Nucl Med*, 2011 May; 41(3): 229-41.

4. Christane K Kuhl, Simone Schrading, Heribert B Bieling, Eva Wardelmann, Cluadia C Leutner et al ; A MRI for diagnosis of pure ductal carcinoma in situ: a prospective observational study *The Lancet*, August 2007; 370(9586): 485 – 492.