CASE REPORT

Extensive intraductal carcinoma breast-clinical and pathological considerations.

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INTRODUCTION: Extensive intraductal carcinoma is proposed for tumors in which the intraductal component comprises 25% or more of the area encompassed by the infiltrating tumor.(1). Ductal carcinoma in Situ with a micro invasive component accounts for less than 1% of all breast cancers and 13.5% of all DCIS have a microinvasive component.(2). The increased rate of early detection of breast cancer due to widespread mammographic screening has led to an increased incidence not only of in situ but also microinvasive carcinoma. DCIS with micro invasion (DCISM) results in axillary lymph node metastases, statistically significant independent predictors of lymph node metastases in DCISM are comedo DCIS. (3)

CLINICAL DETAILS:

A 49 -year-old postmenopausal woman presented with mass in the right breast since three months duration, axillary lymphnodes were not palpable and the contralateral breast was normal. FNAC revealed discohesive clusters of atypical cells with prominent nucleoli in a necrotic background. The smears were termed as positive for malignancy. Patient underwent Radical mastectomy with axillary lymph node clearance.

RESULTS: On gross examination a tumor measuring 6×4×4 cm, the tumor appeared as tiny cystic spaces and grey white material extruded on pressure. Grossly all the resected margins were free of tumor and 8 lymphnodes were dissected, the largest node measured 1.5 cm in diameter. H&E sections revealed features of ductal carcinoma in situ-comedo type(gradeIII). All the margins including the deep resected margin were free of tumor. However 1/8 lymphnode showed complete replacement of the lymphnode by tumor cells. Hence with this background extensive sampling of tumor was done to rule out invasion which revealed a tiny foci of invasion<1mm and an intraductal micropapillary lesion.

DISCUSSION: The American Joint Committee on Cancer defines microinvasive breast carcinoma as the extension of cancer cells beyond the basement membrane into the adjacent tissues, with no single focus larger than 1 mm in greatest dimension. Axillary lymph node metastasis in microinvasive breast carcinoma ranges from 0% to 22%. (2.)Axillary lymph node dissection in microinvasive carcinoma is considered the standard of care, although it is being replaced, in part, by minimally invasive axillary samplings.(4)

Previous studies of patients with infiltrating ductal breast cancer treated with conservative surgery and radiotherapy have indicated that the presence of an extensive intraductal component (EIC) in the excision specimen is highly associated with subsequent breast recurrence. The reason for this association is not clear, but possible explanations include the presence of more extensive disease in the breast or increased radiation resistance among tumors with an EIC (EIC+) compared with those without (EIC-) tumors.(5)

Breast-conserving treatment has become a st**and**ard therapy for early breast cancer with the aim of improving the quality of life of the patient. However, the problem of local failure in the operated breast still remains unresolved. Several groups have noted that invasive cancers accompanied by EIC positive features are associated with higher local recurrence rates within the breast after breast-conserving therapy than EIC negative invasive cancers.(6)

Axillary lymph node dissection or selective axillary node dissection has a place in the surgical approach to DCIS with a microinvasive component. It should be particularly considered when the primary tumor characteristics include T1mic disease with a dominant comedo DCIS, which is not an unequivocal indication for adjuvant chemotherapy. [(5)]

Conclusions:A differential diagnosis of intraductal carcinoma has to be considered in FNAC before terming a case as infiltrating ductal carcinoma,axillary node clearance is mandatory in DCIS and extensive sampling of the specimen is advised to rule out invasion in DCIS.

Keywords: Extensive intraductal carcinoma,Ductal carcinoma in situ,Comedocarcinoma.

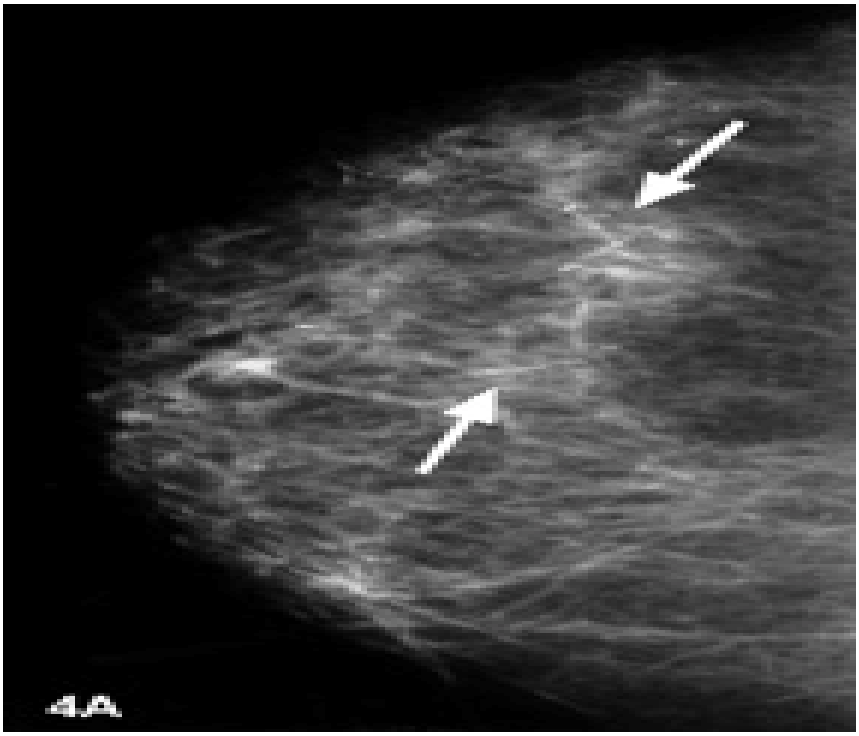

Fig 1:Mammogram (craniocaudal view) demonstrating numerous scattered clusters of microcalcifications

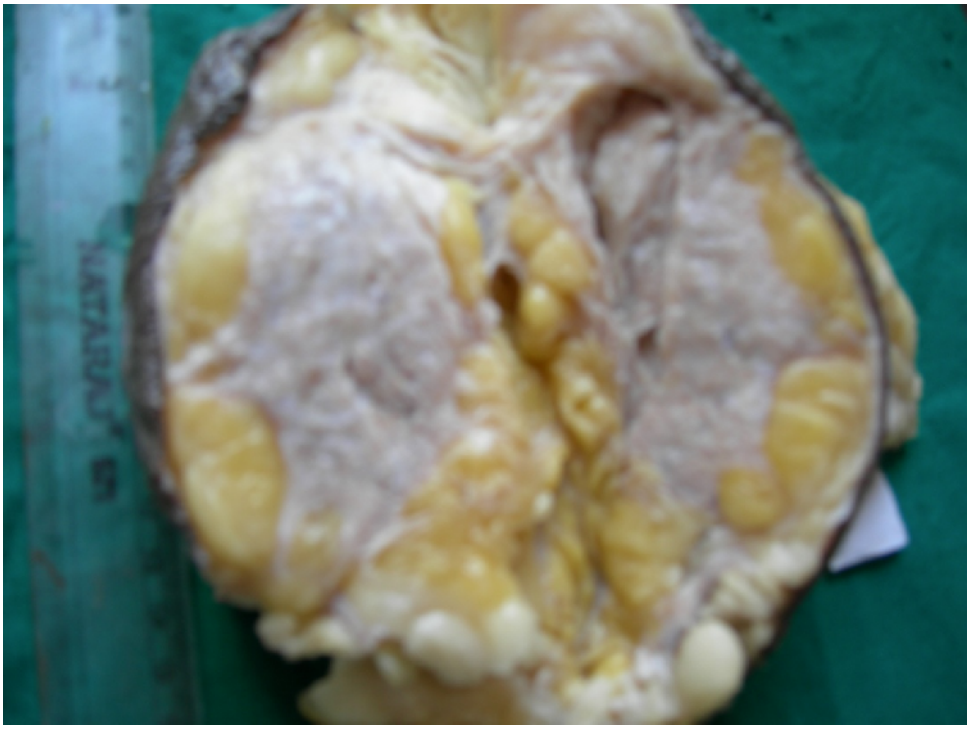

Fig:2 Cut surface of the breast showing involvement of the tumor, more then 50% of the area shows comedo like areas.

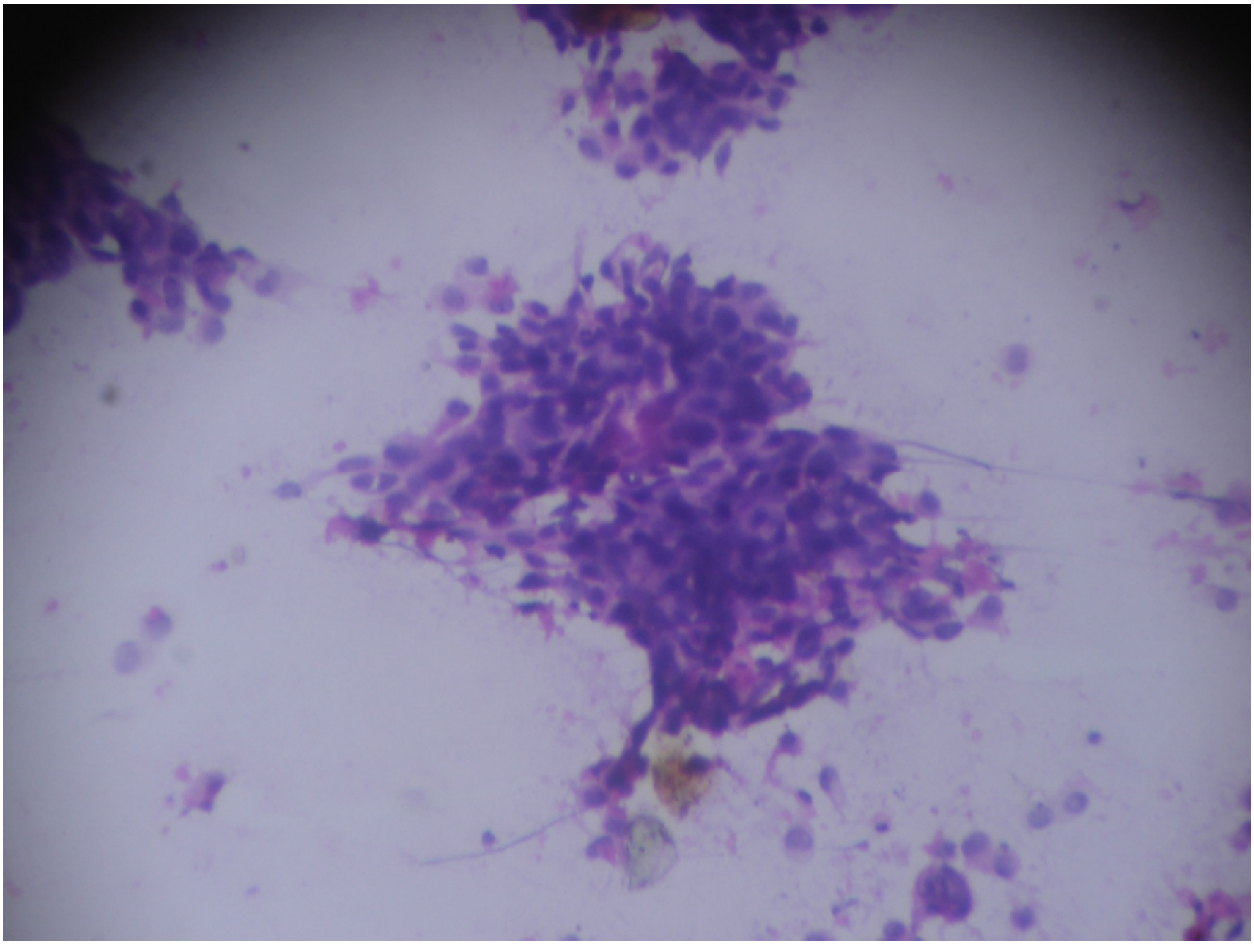

Fig:3 FNAC: Giemsa X 40x showing dyscohesive clusters of atypical ductal epithelial cells.

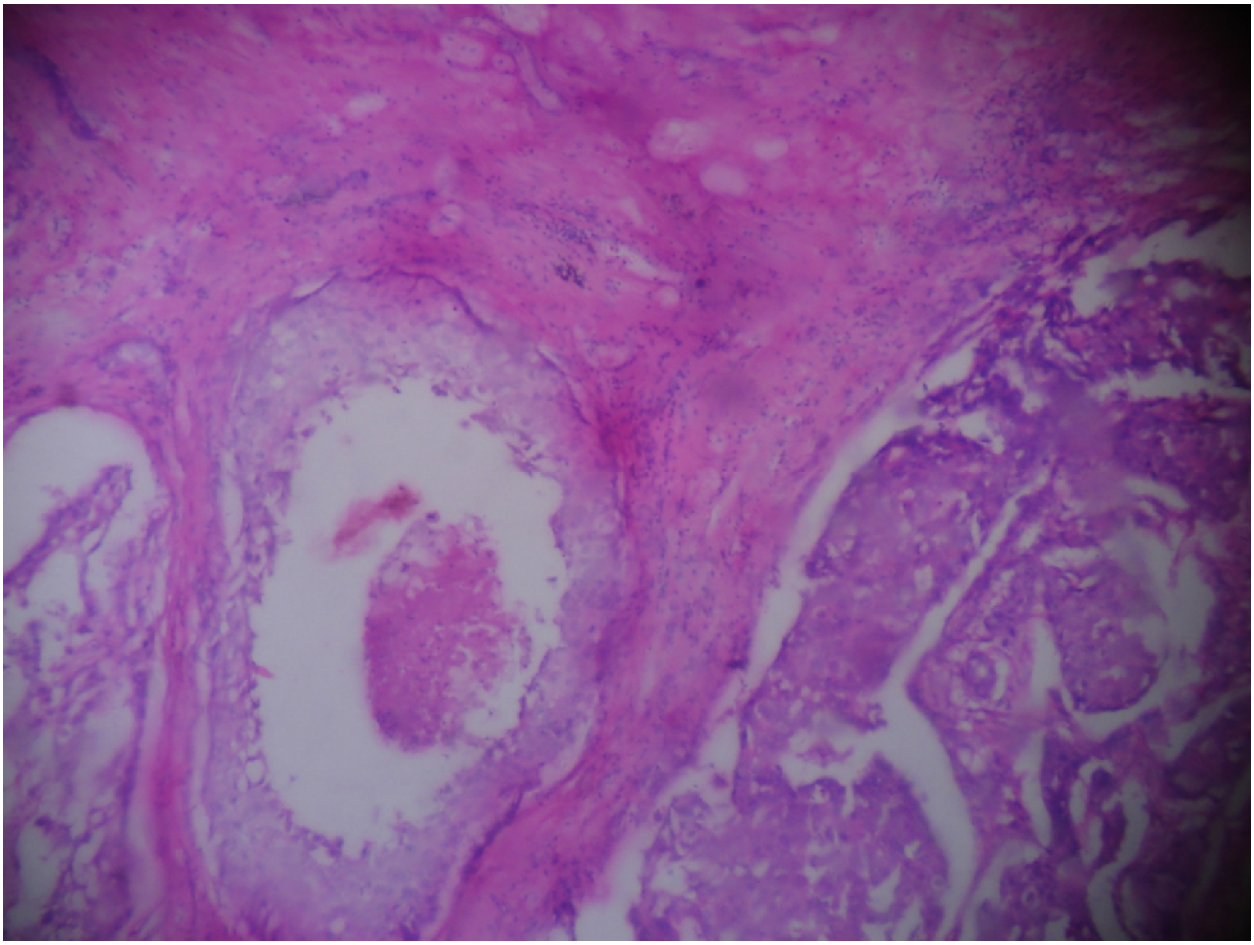

Fig :4 H&E X 40x showing Ductal carcinoma in situ,comedo type and a foci of intraductal papillary lesion.

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