

Research Journal of Pharmaceutical, Biological and Chemical Sciences

Ductal Carcinoma Insitu with Microinvasion: A Case Report.

V Lokeshwari*, Hemalatha Ganapathy, and BO Parijatham.

Department of Pathology, Sree Balaji Medical College Hospital, Chennai, Tamil Nadu, India.

ABSTRACT

65/F came with c/o swelling in the left breast for 6months, on palpation – single nodule felt beneath the nipple and areola. Aspirated blood stained material from the swelling and reported as carcinoma left breast. Mastectomy was done and the specimen was sent for histopathological examination to department of pathology, SBMCH and reported as Ductal carcinoma insitu with microinvasion. DCIS accounts for 25% of all breast carcinomas while DCIS with microinvasion accounts 5% - 10% only. Most commonly occurs during 6th decade. Overall prognosis for microinvasive ductal carcinoma is very good.

Keywords: Stromal invasion, comedo, good prognosis.

**Corresponding author*

INTRODUCTION

Ductal carcinoma insitu with microinvasion originating from the cells that line mammary ducts which have breached the basement membrane. It is usually asymptomatic, if it occurs in younger women it becomes symptomatic and extensive [1].

There are several architectural subtypes of DCIS: solid, comedo, micropapillary, papillary, cribriform, clinging and cystic hyperserretory [1]. Often patients with DCIS have lesion that contain atleast 2 achitectoral subtypes.

DCIS is classified qualitatively by nuclear grade (High, intermediate and low grade) based on cytologic structure and also by presence or absence of necrosis.

DCIS without microinvasion rarely metastasises to axillary lymphnodes [3].

The proportion of patients with DCIS detected by physical finding and symptoms has decreased significantly with increased use of screening mammography.

MATERIALS AND METHODS

The specimens were received in 10% neutral buffered formalin along with the clinical details and the tissue is processed, adequate bits were taken during grossing and haematoxylin & Eosin staining done and histopathological examination revealed the diagnosis.

DISCUSSION

Ductal carcinoma insitu with microinvasion is defined as proliferation of malignant epithelial cells that has breached the basement membrane of the ducts and has invaded the adjacent stroma to depth of 1mm.¹

Microinvasive ductal carcinoma most commonly occurs during the 6th decade. DCIS occurs in 5th decade and usually asymptomatic with no clinically palpable lesion, if presents with palpable lesion then there is increased chances of microinvasion [4]. When it occurs in younger women it becomes symptomatic and extensive [1]. DCIS with microinvasion is most commonly associated with high nuclear grade comedo type DCIS [5]. There are two types of DCIS with MI , type 1 – behaves like DCIS and managed as such and type 2 – less pejorative than IDC-DCIS but is more so than type 1 and has better prognosis [7]. Few Studies indicate that DCIS with microinvasion is an entirely curable disease when treated by mastectomy alone without the need of adjuvant therapy and its prognostic status [2].

In this case, the swelling though small, was clinically palpable of 2x1.5cm on size below the nipple and areola and fine needle aspiration was done and the malignancy was found out.

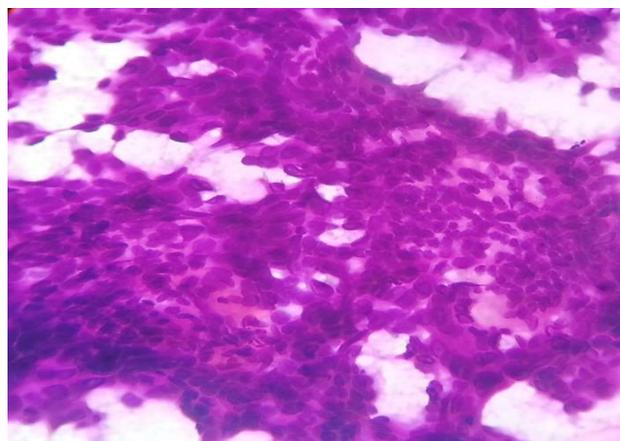


Figure 1: Smear shows scattered and clusters of malignant duct epithelial cells



Figure 2: Gross picture showing cut section of mastectomy specimen

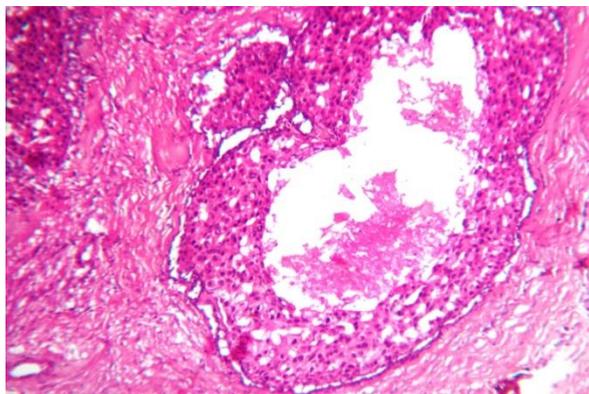


Figure 3: Picture showing comedo type of DCIS with stromal invasion.

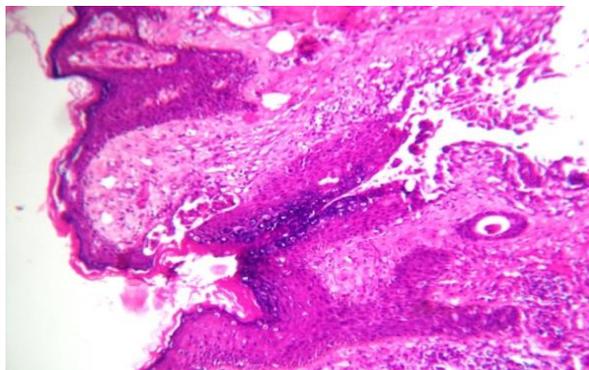


Figure 4: Picture showing nipple infiltration by tumour cells giving rise to pagetoid lesion.

The histopathological examination was reported as Carcinoma of the breast – Grade II with predominant Ductal carcinoma in situ (DCIS) and microinvasion and involving the skin of nipple with reactive lymph nodes.

CONCLUSION

Identifying the foci of invasion in the sections studied also accounts for invasive criteria and it is significant as the treatment for pure DCIS differs from DCIS with microinvasion.

Histological hallmark criteria (dense lymphocytic infiltration) should not be missed by mistaking it as simple inflammatory reaction.

Pre surgical diagnosis by radiological techniques in non palpable lesions is valuable and also in detecting early invasive carcinoma [5]. Sentinel node biopsy can help to avoid axillary dissection [8-10] as the estimated rate of lymphnode metastasis is low but not negligible [6]. Breast conservative surgery and radiotherapy is considered as reasonable approach. Rate of local recurrence is less and distant metastasis is rare. 5 year survival rate for >95% of patients and the overall prognosis is excellent as it is 100% curable.

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