

Paget's Disease of The Nipple: A Case Report

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I. Introduction

Paget's disease is one of the causes of eczematous lesion of the nipple¹. It is associated with an underlying lesion which may range from Ductal Carcinoma In Situ to invasive breast carcinoma². Understanding the pathology helps in planning the further surgical management¹

Case report:

- Case 1: 47 year old lady with eczematous lesion over right breast since 2 years associated with itching. On examination skin over the breast was excoriated and 3x3cm lump was palpable below the nipple areola complex.
- Case 2: 61 year old lady with complaints of eczematous lesion over the left breast since 2 years associated with itching. On examination skin over the breast was excoriated and did not have any palpable lump or lymph nodes.

Specific investigations:

The preoperative study included ultrasound of bilateral breast with axilla, mammography, fine needle aspiration cytology and incision biopsy.

- Case 1: Ultrasound of bilateral breast with axilla showed BIRADS V lesion in the breast with metastatic nodes in the axilla. Fine needle aspiration cytology showed features of infiltrating ductal carcinoma and incisional biopsy done showed features suggestive of Paget's disease.
- Case 2: ultrasound of bilateral breast with axilla showed thickening of the skin of the left breast with predominantly anechoic lesion with central microcalcification and enlarged left axillary lymph node. Fine needle aspiration cytology did not show anything significant and incisional biopsy was done, showed features suggestive of Paget's disease.

Treatment:

Both the patients underwent Modified Radical Mastectomy under general anaesthesia. They withstood the procedure well and there were no intraoperative complications. Drain was removed on post-operative day 4. Rest of the post-operative period was uneventful and the patients were discharged from the hospital on post-operative day 14.

The histopathology of Case 1 showed Paget's disease of the nipple with Invasive ductal Carcinoma of the breast and that of case 2 showed Paget's disease of the nipple with Ductal Carcinoma in Situ.

II. Discussion

Paget's disease is a rare histologic breast cancer that can appear as an isolated disease in 1.4-13% of the cases or associated with an insitu or invasive glandular carcinoma in 90-100% of the cases³. It is characterised by infiltration of epidermis and destruction of the nipple by neoplastic cells from the underlying malignancy⁴. They classically present with a unilateral, thickened, pigmented, eczematous, erythematous, weeping or crusted lesion over the nipple areola complex with irregular borders⁵. The treatment depends on the type of carcinoma associated. Patients with Ductal carcinoma In Situ treated with Breast Conserving Surgery, which is an appropriate alternative to mastectomy, have to be advised about irradiation and hormonal therapy⁶. Invasive glandular carcinoma has to be treated using the same guidelines as a classical breast carcinoma with adjuvant systemic therapy and irradiation¹. Modified Radical Mastectomy with or without axillary lymph node dissection has long been regarded as the standard therapy³. Sentinel lymph node prior to the surgery is recommended in order to avoid the complication of axillary dissection³.

III. Conclusion

An eczematous lesion of the breast needs a prompt evaluation¹.The prognosis is based on the underlying breast cancer – its invasiveness, the presence of mass and lymph node involvement^{1,3}.Treatment depends on the stages of the tumor and other prognostic and/or predictive factors³.

References

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Fig 1 and 2: Case 1 and 2 showing eczematous lesion over the breast



Fig 3: Mammogram showing destroyed nipple areola complex

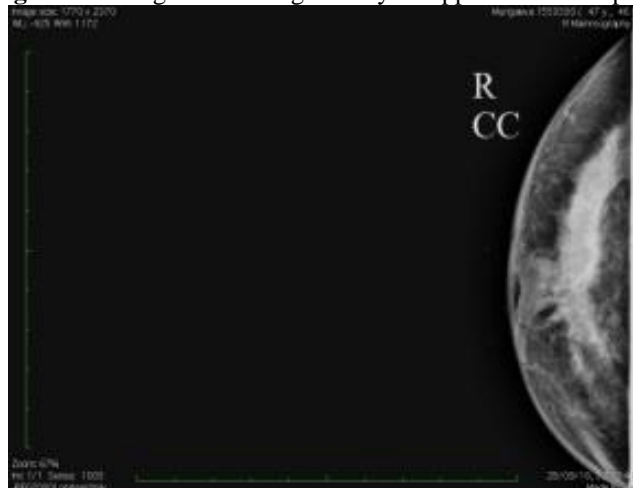


Fig 4: Fine needle aspiration cytology with May GrunwaldGiemsa stain showing features suggestive of infiltrating ductal carcinoma

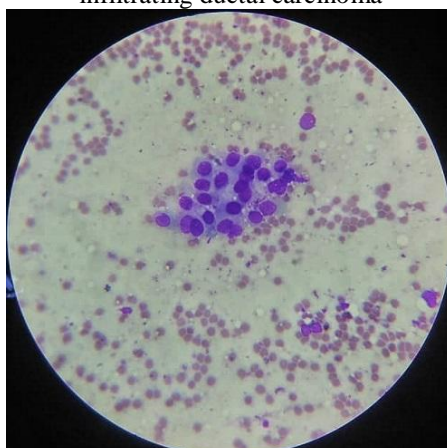
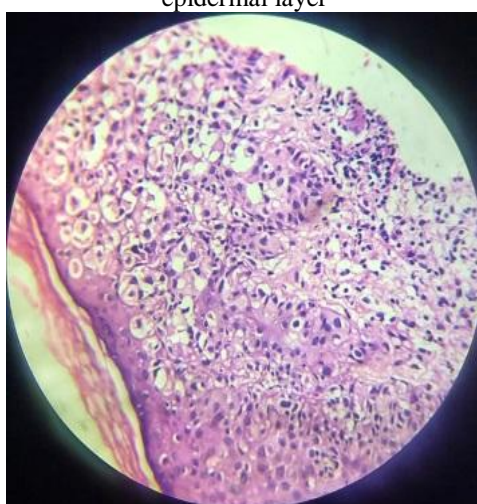


Fig 5: Resected specimen including the breast tissue and the axillary tail



Fig 6: Histopathology with Hematoxylin and Eosin stain observed under 40x magnification showing Paget's cells (large clear cells with abundant pale cytoplasm, hyper chromatic nuclei with prominent nucleoli) in the epidermal layer



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