DOI: http://doi.org/10.4038/jmj.v28i1.42

Case report
Idiopathic Granulomatous Mastitis

[1]Lavanya S, [2]Raviraj S

Summary

37 year old, mother of two, presented with clinically and radiologically suspicious (malignant) left breast lump of 3 months duration. Even though FNAC revealed predominant inflammatory cells as the lump was highly suspicious it was decided to go for Wide Local Excision and the histopathology report revealed Idiopathic Granulomatous Mastitis. She is being followed up in surgical clinic without a relapse yet.

Background

It is an uncommon benign breast disease of unknown etiology, common in parous woman, mimics either breast malignancy or breast abscess. Clinical, radiological and even cytological findings can be misleading. The diagnosis is made by histological evaluation with exclusion of other granulomatous diseases. Treatment options are either immunosuppressionor surgical excision with or without immunosuppression. High suspicion is necessary for early detection and proper treatment and thereby prevention of unnecessary mastectomies.

Key words: Idiopathic granulomatous mastitis, Breast carcinoma, Breast abscess

Case Presentation

A 37-year-old, mother of two, presented with progressively enlarging painful left breast lump with on and off severe throbbing pain of three months duration. There was neither nipple discharge nor discharge via overlying skin noted. She did not have systemic features or past or family history of autoimmune diseases. On examination 9cmx6cm, tender, firm, solid, ill-defined lump was found at the upper outer quadrant of left breast. Overlying skin didnot have inflammatory changes. It was not attached to deep structures but skin tethering and palpable axillary lymph node were found.

Investigations and management

Ultrasound scan revealed mixed echogenic area with 1.4X1cm left side axillary lymph node with central fat echogenicity suggestive of either contusion or tumour. FNAC showed predominantly inflammatory cells and histology was suggested. Wide local excision was done and histology revealed lobular inflammation with neutrophils, lymphocytes and scattered foreign body type giant cells with large area of necrosis and inflammation (abscess) without microorganisms, epithelial hyperplasia or malignant changes suggestive of idiopathic granulomatous mastitis with central abscess formation. The AFB was not found in the specimen. ESR and the other vasculitic screening were negative. During follow up in surgical unit, she has not been found to have relapses.

Discussion

Idiopathic granulomatous mastitis is an uncommon, disfiguring, benign breast disease of unknown etiology which mimics carcinoma of the breast or breast abscess and was reported first in 1972 by Kessler and Wallach[1234].

It is common in parous woman, usually withinfive years of child birth and in those who breast fed their child for more than one year[4].Drugs e.g. Metoclopramide induced galactorrhoea and breast trauma were noted as risk factors[7]. Common presentation is with unilateral, expanding, tender breast lump with surrounding local inflammation with or without axillary lymph node enlargement[23]. Clinical and radiological diagnosis is difficult and inconclusive[25]. Hypoechoic lobulated or irregular mass is seen on ultrasound and the characteristic feature is tubular hypoechoic extension from the dominant mass which may connect to other nearby masses if there are any. Ill-defined mass or focal fibro glandular asymmetry with or without architectural distortion can be seen on mammography. On MRI it may mimic inflammatory breast carcinoma[4]. Even cytology can be misleading[6], there are instances where mastectomy was done following triple assessment and later mastectomy specimen histology revealed idiopathic granulomatous mastitis. Histology is the main stay of diagnosis with exclusion of other causes of granulomatous diseases like TB fungal infections, Wegener's granulomatosis, poly arteritis nodosa etc[13]. Histological features are non caseating granuloma limited to mammary lobules with or without microabscesses[4]. In one study, 50% of patients had spontaneous resolution without specific therapy[2]. Immunosuppression like steroids, methotrexate, etc. are used as either mono therapy or in combination[12356]. Surgical excision with or without immuno-suppression is an option especially

1. Registrar in General Surgery, Professorial Surgical Unit, Teaching Hospital, Jaffna
2. Consultant Surgeon and Senior lecturer, Professorial Surgical Unit, Teaching Hospital, Jaffna

in patients who are not responding with immunosuppression alone[135]. Severe recurrent diseases may end up in mastectomies. As 50% of patients have recurrences long term follow up is necessary[5].

Conclusion

Idiopathic granulomatous mastitis mimics breast malignancies. Therefore, tru-cut biopsy or excision biopsy is beneficial to confirm the diagnosis.

Take home messages

- IGM mimics breast malignancies and breast abscesses
- High suspicion is necessary for early diagnosis and proper treatment
- Diagnosis is made on histological features with exclusion of other granulomatous diseases
- Treatment will be Immunosuppression with or without surgery

References

1. D molly et al, BMJ case reports 2011; Doi;10.1136/bcr. 05.2011.4271

2. Lai EC, et al. The role of conservative treatment in idiopathic granulomatous mastitis, Breast J 2005;11;454-6

3. Schmajuk G et al, first report of idiopathic granulomatous mastitis treated with methotrexate monotherapy. J rheumatol 2009;36:1559-60

4. Grace rubin, et al, Idiopathic granulomatous mastitis;SA Journal of radiology March 2011;4-5

5. Azlina AF, et al, chronic granulomatous mastitis: diagnostic and therapeutic considerations; world J surg 2003; 27:515-8

6. Bani-hani KE et al, idiopathic granulomatous mastitis: time to avoid unnecessary mastectomies. Breast J 2004; 10: 318-27

7. C Serni G, et al Granulomatous lobular mastitis following drug induced galactorrhea and blunt trauma. Breast J 1995;5: 398-403