İstanbul Tıp Dergisi 2007:1;42-44

Idiopathic Granulomatous Mastitis: A Case Report

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ÖZET

İdiopatik Gramitomatöz Mastit

İdiopatik granülomatöz mastit, genellikle meme kanseri düşünülerek yanlış tanı alan, selim seyirli, kronik, kazeyifiye olmayan granülomlarla seyreden bir meme hastalığıdır. Çoğunlukla çocuk doğurma yaşındaki kadınlarda görülür.Tanı koyulmadan önce meme kanseri ve granülomatöz değişiklik yapan tüm hastalıklar ekarte edilmelidir. Tedavide tutulmuş dokunun geniş eksizyonu önerilmektedir. IGM ve eritema nodozum birlikteliği olup metilprednizolon ile başarıyla tedavi edilen bir bayan hasta sunmaktayız.

***Anahtar kelimeler**: Granülomatöz mastit, kortikosteroidler, meme hastalıkları*

SUMMARY

Idiopathic granulomatous mastitis (IGM) is a benign, chronic non-caseating granulomatous breast disease, often mistaken for breast cancer. It usually affects women of child-bearing age. Breast carcinoma and all known causes of granulomatous changes must be excluded before the diagnosis. Treatment consisted of wide local excision of the involved tissue. We present a case of a female with IGM and erythema nodosum (EN) who was treated successfully with methylprednisolone.

***Key words**: Granulomatous mastitis, corticosteroid, breast disease*

INTRODUCTION

İdiopathic granulomatous mastitis (IGM) is a benign breast disease first described by Kessler and Wolloch in 1972(1). This disease usually affects women of child-bearing age with a history of oral contraceptive use. It is characterized by chronic, non-caseating granulomatous lobulitis of unknown etiology. Failure to recognize granulomatous mastitis, which may be consequently mistaken for breast carcinoma, has previously resulted in unnecessary mastectomies or open biopsies(2). Herein, we report a woman with IGM and erythema nodosum who was treated successfully with steroid therapy.

CASE REPORT

A 31 year old female presented with 1 month history of red, painful breast mass. It had diagnosed as breast abscess by surgeon and drained. She had treated with antibiotics without response and painful, tender nodules had appeared on her legs. Her medical and family history was ordinary. Her last child was born 7 years ago and previously, was breastfed for one year and used no oral contraceptive pill. Dermatological examination was revealed multiple deep nodules, discharging sinus and fistula formation on her right breasts upper outher quadrant and nipple retraction (Fig 1-2). Right axillary lymphadenopathy was present. On her legs there were tender, erythemetous multiple subcutaneous nodules. Her physical examination was normal. The erythrocyte sedimentation rate was 90mm/h. Gram stain, bacterial and fungal culture for infectious etiology, mycobacterial PCR, PPD, chest graphy for tuberculosis, VDRL, TPHA tests for syphilis, were negative. A punch biopsy was performed and showed chronic abscess lined by severely inflamed granulation tissue containing numerous histiocytes. Trucut needle biopsy performed and histology showed a noncaseating granulomatous inflammation (Fig 3-4).Serum angiotensin converting enzyme, calcium and urine calcium was in normal limits that we exclude sarcoidosis and c-ANCA , p-ANCA was negative that we exclude vasculitis. Therefore we considered the case as IGM. EN lesions healed completely with antibiotic therapy but breast lesions were persisted. 32 mg/day methylprednisolone was given for 30 days with a good response and

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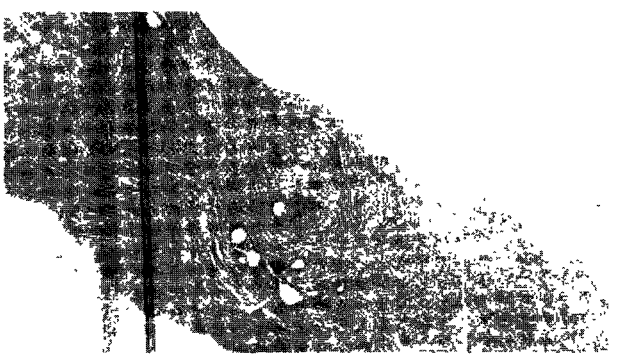
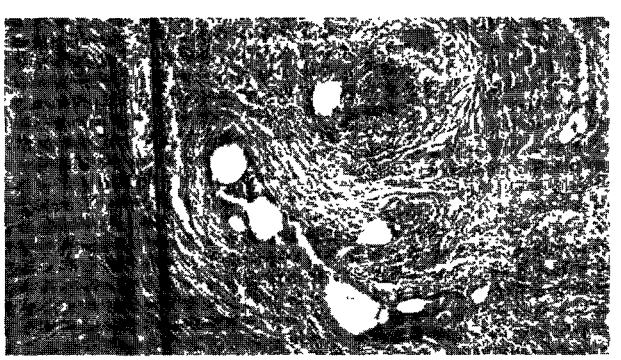
Resim 1-2: Multiple deep nodules, discharging sinus and fistula formation on her right breasts upper outher quadrant and nipple retraction



Resim 3: Noncaseating granulomatous inflammation (HEx10)



Resim 4: HEx40

Resim 5-6: After the treatment with methylprednisolone.

then tapered off over the course of 3 months (Fig 5-6). There was no recurrence during the next 2 months of follow up.

DISCUSSION

Granulomatous mastitis is a rare, chronic, noncaseating,granulomatous lobulitis of uncertain etiology. It clinically mimics breast cancer and is frequently mistaken for a malignancy, particularly if the regional lymph nodes are enlarged. Thus, failure to diagnose it may result in unnecessary mastectomies(3).

Etiology remains unclear, some authors suggests causes including localized autoimmune phenomenon, reaction to childbirth, the previous use of oral contraceptives and infectious etiologies. Clinically, patients usually present with an unilateral breast mass in any quadrant. Regional lymphadenopathy may be present(2,4).

Besides mimicking breast carcinoma, other diseases should also be excluded that might cause a granuloma in the breast, such as tuberculosis, syphilis, and histoplasmosis infections, as well as a foreign-body granuloma, vaccination granuloma, mammary duct ectasia, sarcoidosis, Wegener's granulomatosis, giant cell arteritis, and polyarteritis nodosa(3) .

Neither mammography nor Doppler ultrasonography

can distinguish granulomatous mastitis from either fibroadenoma or carcinoma of the breast. Fine-needle aspiration biopsy is the standard diagnostic procedure (5). The cytological pattern, consisting of multinucleated giant cells, debris, neutrophils, macrophages, epithelioid cells, in the absence of foamy cells, caseation, and demonstrable organisms, should lead to consideration of granulomatous mastitis(2,5). Treatment consisted of wide local excision of the involved tissue. Complications fistulae and abscess have been reported, and the disease may recur after surgery (4). DeHertogh and colleagues were the first to advocate the use of corticosteroids to treat granulomatous mastitis(6). Several other reports of using prednisolone in the treatment have also been published (7).

Our patient had also erythema nodosum lesions on her legs. IGM and EN is rare association reported in the literature (8). Breast carcinoma and all known causes of granulomatous changes excluded before the diagnosis. EN lesions disappeared with antibiotic therapy and mastitis lesions successfully treated with methylprednisolone for 3 months duration. Steroid treatment can cause some severe adverse effects but unnecessary mastectomies can be prevent. As in our case, corticosteroid is the most effective therapy of IGM.

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