



Ruptured Breast Abscess with Uncontrolled Bleeding

KEYWORDS

Breast abscess, Malignancy, Hypo cellular marrow

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ABSTRACT

Breast abscesses are common more commonly allied with inflammatory process and have good response to treatment. Association of abscess with underlying malignancy is 4.3%, can be seen more commonly with primary squamous cell carcinoma breast rather than ductal carcinoma. Angiolipoma is the only benign neoplasm mentioned in the literature seen associated with breast abscess. We herein present an interesting case report of 35 year old female presented in surgical emergency with ruptured breast abscess and profuse bleeding from the abscess bed, hence compelling the surgeon to think of underlying malignancy and creating apprehension in a patient. As patient was found to be pancytopenic on routine blood investigations, bone marrow examination was performed and unpredictably patient turned out to be a case of hypo cellular marrow.

Introduction

Breast abscess has 3% to 11% association with underlying mastitis in non lactating breast and 0.3% to 1% incidence in lactating female^{1,2}. Most of the times it responds well to the treatment with antibiotics or incision and drainage may have to be done. Sometimes resistant cases show association with malignancy and carcinoma can be detected in the cavity-wall tissue. Pure primary squamous cell carcinomas have seen associated with breast abscess rather than any other type, pre-operative diagnosis is possible but requires a high level of suspicion to avoid a delay in diagnosis. But hypo cellular or aplastic marrow resulting in thrombocytopenia and dramatically complicating the condition and creating the chaos of diagnosis is very extraordinary and unpredictable.

Case report

A 35 year old female presented with ruptured left breast abscess and bleeding in surgical emergency. There was history of swelling breast for last two months and for that patient underwent fine needle aspiration cytology examination, which revealed fibrocystic disease. Since then she was complaining of pain in the left breast. No history of lactation or diabetes was present. On examination whole of breast tissue was warm, indurated with ulcer over it. Bleeding and oozing from the site of rupture was also noted. Routine complete blood counts show low values. Liver and renal function tests were normal. Platelet rich plasma was transfused but without any significant improvement in platelets count and condition of the patient (Table 1).

Blood parameters	Day 1	Day 2	Day 3	Day 4
Hb (g/dL)	8.2	8.3	8.2	8.3
TLC ($\times 10^3/\mu\text{l}$)	7.1	5.3	4.3	4.6
Platelet ($\times 10^3/\mu\text{l}$)	40	58	68	68

Table 1: Blood parameters of the patient after platelet rich plasma transfusion

Keeping in view the possibility of underlying malignancy, in spite of persistent thrombocytopenia, incision biopsy was

performed from abscess bed which revealed blood clot and few entangled superficial squamous cells only. No malignant cell was identified. Bone marrow examination was done to explore the cause of low cell counts and it was found to be a case of hypo cellular marrow (Figure 1).

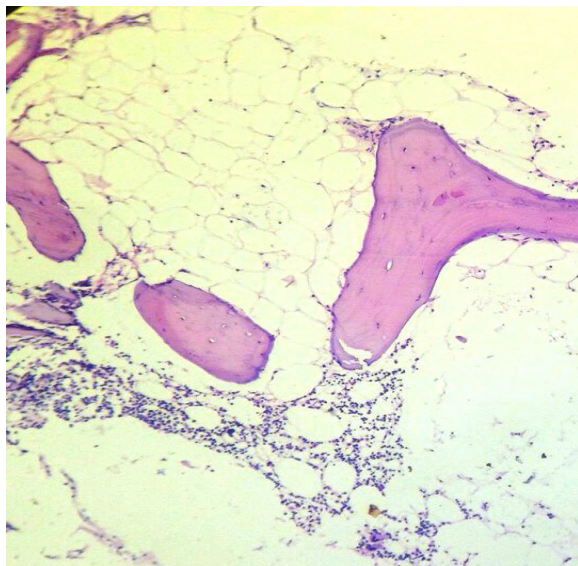


Figure 1: Hematoxylin & eosin stained sections show hypo cellular bone marrow with focal hypercellular area (40X)

Discussion

Breast abscess is the worsening of an underlying inflammatory condition of parenchymal tissue. The common association being considered in young and child bearing age group is lactation with 0.1% to 3% incidence¹. But it can occur otherwise in non lactating breast also². These lesions are considered to be of great clinical importance because of the potential of

confusion with cancer. Breast abscess is usually formed after rupture of mammary ducts and it may be located deeply in the parenchyma (peripheral) or in periareolar region (central). Centrally located abscess is also termed as periductal mastitis and is more common than peripheral type. Peripheral lesions are often associated with underlying conditions such as diabetes, rheumatoid arthritis, steroid treatment, granulomatous mastitis and trauma³.

As bleeding is an alarming sign of malignancy and when it comes along with abscess without history of lactation then clinically it may simulate carcinoma and can increased the anxiety and apprehension of both the clinician as well as the patient. Gupta C and fellows reported a case of breast abscess in a female with underlying primary squamous cell carcinoma^{4,5,6}.

Scott and his colleagues in 2006 discussed the issue that whether the rate of breast cancers taking place in breast abscesses, warranted biopsying all abscesses or not. As seen in the present case biopsy of abscess bed was performed immediately under apprehension in spite of low platelet counts⁶.

All of the published cases in the literature of breast lesions related to an abscess have been described in women aged more than 40 years are carcinomas, an exception being a benign breast lesion an angiolipoma presenting as a breast abscess in a 21-year-old woman^{6,7,8,9,10}. But it is very unusual to find profusely bled ruptured breast abscess; reason may be the trivial trauma of FNA resulting in hematoma formation, a complication due to underlying hypo cellular marrow with reduced platelets¹¹.

Conclusion

Breast abscess is frequently encountered in routine surgical practice with excellent outcome. Rarely association of abscess with underlying malignancy can be seen in old age group. But young female with copiously bled breast abscess bed may be a sign of malignancy. Unusual presentation of common disease also can create apprehension and fear both for patient and clinician. The present case was one of the examples of unpredictable presentation of common disease. Hence was considered for case report.

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