

**CASE REPORT**

Infarction in Fibroadenoma Breast During Pregnancy with Skin Necrosis and Fungation

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Abstract

A 35 year old multigravida in the 24th week of gestation presented with history of swelling left breast of 2 years duration. The swelling rapidly increased in size during the pregnancy & underwent spontaneous necrosis of skin with fungation & haemorrhage. Fine needle aspiration cytology showed a diagnosis of fibroadenoma. Lumpectomy was performed in the emergency & histopathology of specimen revealed infarction in fibroadenoma. Patient delivered a normal healthy baby and is alright at 6 month follow up.

Key Words

Fibroadenoma, Infarction, Pregnancy

Introduction

During Pregnancy, the breast can be affected by a variety of specific and unique disorders, including benign disorders closely related to physiological changes, inflammatory diseases, Juvenile papillomatosis, benign and malignant tumors (1). Breast parenchyma can occasionally suffer spontaneous infarction but infarction of the benign breast lesions is exceedingly uncommon event. This can occur in intraductal papilloma (2) or fibroadenoma or previously healthy breast tissue (3). Fibroadenoma spontaneously infarcts in about 0.5-1.5% of the cases and in contrast to typical non-infarcted lesions, these rare cases primarily present as painful breast masses in young women who are either pregnant or lactating (4). The present case seems to be unique in presentation as necrosis of overlying skin with fungation and haemorrhage, required blood transfusion and emergency surgery and hence it is worth reporting.

Case Report

A 35 years old multigravida female, in the 24th week of gestation was referred from the district hospital with a diagnosis of carcinoma left breast. There was a history of swelling in left breast of 2 years duration which gradually increased upto a lemon size before conception. But during the pregnancy, the swelling rapidly increased in size till 24th week of gestation, when suddenly it became more painful, enormously enlarged, leading to

necrosis of the overlying skin, fungation and bleeding. Forty eight hours after this event patient came to Medical College Jammu in a state of shock. At the time of admission she was pale looking, had tachycardia (Pulse Rate 140/min), with Blood Pressure of 80/50 mm of Hg. Uterus was 24 week size gestation and foetal heart sounds were normal. Local examination of the breast showed a fungating mass in the periareolar area and a diffuse swelling involving the upper inner, upper outer and lower outer quadrants. The fungating mass was soft to firm in consistency, covered with clotted blood and there was profuse haemorrhage once the dressing was removed (Fig. 1). Nipple was pushed towards the medial side. Axillary lymph nodes were not palpable and right breast was normal. Laboratory investigations revealed a haemoglobin of 6.2 gm/dl. Bleeding time, clotting time, total and differential leucocyte count, liver function tests and renal function tests were within normal limits. Breast ultrasound could be an excellent imaging modality for diagnosis and differentiation of benign and malignant lesion (5). However, no ultrasound of the breast or mammogram was done. Although, Ultrasound of the abdomen showed a living 24 week size foetus and rest of the ultrasound findings were normal. Patient was resuscitated with intravenous fluid, two units of blood and antibiotics. Fine needle aspiration cytology was asked for in the

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emergency which showed a diagnosis of fibroadenoma. After proper resuscitation, patient was taken up for surgery and emergency lumpectomy was performed under general anaesthesia with addition of tocolytic drugs (inj. Isoxsuprine, inj. Proluton depot). Post operative she continued on tocolytic drug, antibiotics and analgesics. Suction drain was removed after 48 hrs. of the surgery and stitches were taken out on 10th postoperative day. Gross specimen of the swelling showed a grey white, lobulated, soft, fleshy mass about 20×15×12 cm size with fungation and central areas of haemorrhage. Microscopic examination of the mass revealed large areas of infarction in fibroadenoma and histological pattern mostly seen as pericanalicular with loose oedematous stroma (Fig. 2). Patient delivered a healthy full term male baby and is alright at 6 month follow up.

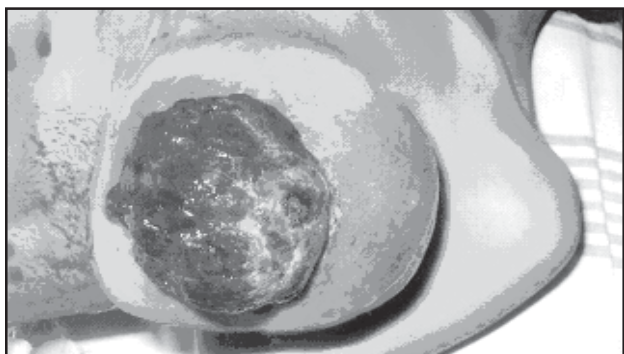


Fig 1: Preoperative Photograph Showing Fungating Mass with Area of Infarction and Haemorrhage

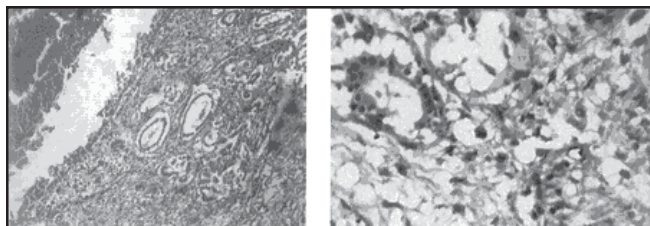


Fig 2: a) Low power Showing Areas of Haemorrhagic Infarction in Fibroadenoma. b) High power Exhibiting Pericanalicular Pattern with Loose Stroma

Discussion

Spontaneous infarction in a fibroadenoma constitutes the most characteristic example of necrosis of the breast tissue (6). Delaure and Redon (7) in 1949 were the first to describe spontaneous infarction in fibroadenoma. Although successive reports have been published since then, this type of pathology has not been dealt extremely in the literature (8). One of the most important feature of spontaneous infarction in fibroadenoma is its association with pregnancy and lactation (9,10) although it has also

been described in adolescent girl (11) and following fine needle aspiration (12). The pathophysiology of infarction has been attributed to the relative vascular ischemia during phase of increased metabolic demand (4) or thrombosis of the supplying vessels during pregnancy (13). Infarction in fibroadenoma must be differentiated from a carcinoma (8) and our patient was also referred with a diagnosis of malignancy. Infarction may be focal or there may be total necrosis of a pre-existing benign lesion (10). Total or subtotal infarctions are likely to involve the overlying skin as well (9), as was seen in the present case. After reviewing the pertinent literature most of the reported cases have presented with tender lumps which were excised electively. But our case is unique in the presentation with fungation and haemorrhage for which blood transfusion and emergency surgery was required.

Conclusion

An awareness about this unusual lesion is required while dealing with the breast masses during pregnancy and further the importance of distinguishing such a pathology from carcinoma is highly stressed upon.

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