Abstract:
Lipomas of the breast are usually small but a giant lipoma of the breast is uncommon and only a few references are found in the literature. They may mimic malignant breast tumors. A 42-year-old woman presented with a 1-year history of a slowly enlarging right breast mass. Clinical examination revealed a palpable smooth, soft-firm, well circumscribed mass of size 15x10 cm in the right breast. FNAC showed few clusters of mature adipocytes and scant fibroblasts. On ultrasonography, the mass was homogenously hypoechoic with smooth margins. Preoperatively a diagnosis of benign neoplasm of the breast, probably a giant lipoma was considered. Surgical excision of the mass was done. Histological examination confirmed it as a lipoma and no evidence of atypia or malignancy was found. The diagnosis of a breast lipoma is not usually easy but can be made if the condition is borne in mind and a careful history and clinical examination is carried out.

Keyword: Lipoma, Giant breast lipoma, Breast lipoma, Giant lipoma

INTRODUCTION:
Lipomas are the most common benign mesenchymal tumors that can develop in all organs of the body but they are commonly found in the subcutaneous tissue and gastrointestinal tract. These tumors are composed mainly of mature adipocytes. Essentially these are pockets of fat that is encapsulated by a fibrous band. They usually present as slow growing painless encapsulated masses in the age group 40 - 60 years. Its incidence is estimated to be around 10%. Though they are the most common benign tumors encountered their occurrence in breast is less frequent. Although lipoma of the breast is a trivial condition, it often causes diagnostic and therapeutic uncertainty. Clinically, it may be difficult to recognize a lipoma from a prominent fat lobule or from other benign or malignant lesions. Lipomas of the breast in an elderly female are difficult to differentiate from carcinoma as the
chance for malignancy in a painless lump is higher in this age group.
We present a case of 'giant' lipoma of the right breast (15 x 10 cm in dimension) in a 42 year old female.

CASE REPORT
In August 2011, a 42 years old women presented to our department with swelling in her right breast. One year ago she noticed the swelling which was gradually increasing in size since then. The swelling is painless. She gives no history of trauma or nipple discharge. There is no history of loss of weight or appetite. She is married and has one living child. She had her menopause 3 years back and there is no history of treatment for breast disease or for the swelling in the past. She had no family history of breast carcinoma.

In view of the long history and the absence of palpable nodes in the presence of such a large swelling the possibility of a benign neoplastic lesion was considered. An X-ray of the chest was normal and a full blood count did not reveal anything of significance. FNAC showed few clusters of mature adipocytes and scant fibroblasts. On ultrasonography, the mass was homogeneously hypoechoic with smooth margins. Preoperatively a diagnosis of benign neoplasm of the breast, probably a giant lipoma was considered and an excision biopsy was planned. Under general anesthesia the swelling was excised through a curved incision over the lump, parallel with the lines of Langer close to the areola. Intra-operatively the (15x10x5 cm) mass was found to be a lobulated globular fatty tissue well surrounded by a capsule. Histopathologic examination confirmed the specimen as a lipoma of the breast. No evidence of atypia or malignant change was found in the specimen. Patient was assured about the benign nature of tumor and a follow up for 3 months has shown her to be disease and symptom free.

DISCUSSION:
Giant lipomas are usually seen in the scapula, neck, upper back, hip, buttocks, upper and lower extremities, axilla, and breast. Most lipomas are small in size with a diameter of 5 cm or less and no

Pre-Operative picture of the patient with a giant lipoma of the right breast
On examination she was well built. Asymmetry of the breasts was noted, the right breast being larger than the left. The nipples were at the same level and there was no discharge from the nipples. No dimpling or any other skin changes were seen. Both the upper and lower lateral quadrants of the right breast were completely occupied by a large swelling of size 15x10 cm which was firm, non-tender, well circumscribed and was not fixed to the skin or deep muscles. No axillary lymphadenopathy was found. The left breast was normal and no nodes were palpable in the left axilla or in both the supraclavicular area. The abdomen was soft with no masses palpable. The cardio-vascular and respiratory systems were clinically normal. No neurological lesion was present.
Operative picture of the giant lipoma of the breast

more than several grams in weight. Sometimes they can reach large sizes. Sanchez et al. defined a giant lipoma as a lesion of at least 10 cm in one dimension. On the other hand, Hawary et al. characterized a giant breast lipoma as a lesion of at least 5 cm in one dimension or weighing more than 500 g. The largest lipoma documented weighed 22.7 kg (Brandler et al. 1984). Giant lipomas of the breast are extremely rare and Cavalcanti Ribeiro et al. described a breast lipoma weighing 5.7 kg and measuring 35 x 23 x 20 cm. Delli Santi et al. reported a patient with a lipoma that weighed 257 g and measured 15.5 X 9.3 X 4.5 cm. More recently, Grossman et al. reported another similar giant lipoma measuring 17 X 17 cm. The breast lipoma of the reported patient weighed 283 g and measured 17.5 X 14.3 X 6.2 cm, which was in the range of those described previously in the literature and recognized as giant-sized. Though lipomas of the breast are frequently seen giant lipomas of the breast are extremely rare and only a few cases have been described in the literature. Lipomas of the breast usually present as a slow-growing, painless, single, well defined, smooth, possibly lobulated, soft or firm, mobile tumor in the breast and skin changes are present in only a few cases. Giant lipomas of the breast can cause major breast asymmetry and may cause functional problems like lymphedema and interference with innervation.

The main concern with a giant lipoma is to exclude malignancy. The presence of liposarcoma should be ruled out. It is virtually impossible to clinically diagnose a lipoma of the breast. One study showed that out of 108 patients of clinically diagnosed breast lipomas 25% were found to be incorrect. Only 11.4% patients fulfilled the triple diagnostic criteria. Several radiological investigations have been described for diagnosing deep lipomas in the breast. Because of the normal fatty composition of the breast imaging can be helpful, but are not diagnostic. Mammography and ultrasound are less sensitive in detecting a breast lipoma. Though the gold standard investigation for lipomatous mass is a magnetic resonance imaging it is extremely difficult to differentiate a giant lipoma from liposarcoma. Fine needle aspiration cytology (FNAC) only shows fat cells without any comment on capsular status. Hence a definitive conclusion cannot be drawn based on these investigations. Only histological examination will give a definitive diagnosis. In our case, the patient underwent complete surgical
Resected specimen
Various investigations also do not differentiate between breast lipoma and breast carcinoma. Other breast masses that may be clinically confused with a giant lipoma of the breast are giant broadenomas, phyllodes tumors, pseudolipomas, hematomas, hamartomas and liposarcomas.

Pseudolipoma
True breast lipomas should be differentiated from 'pseudolipomas'. Pseudolipoma is an uncommon presentation of breast cancer. It is a lump with all the clinical features of a lipoma but conceals a slow growing breast carcinoma beneath or in the center of the fat. In one series of 410 breast cancers, 18 pseudolipomas were observed, an incidence of 4.4%. The slow growing breast carcinoma draws together the deep attachments of the retinacula cutis which results in a reduction in volume of the fat-filled compartments, so that the compressed fat pushes the skin outwards. If the process continues, the aggregation of fat produces an obvious swelling with a lobulated appearance. Rarely, chronic inflammatory mastitis with mammary duct ectasia may produce a pseudolipoma.

The treatment of a giant breast lipoma is excision. Other treatment modalities for giant lipomas is suction-assisted lipectomy (liposuction). Liposuction allows for smaller incisions and fewer complications in wound healing, but it increases the risk of hematomas, and recurrence is likely due to incomplete removal of the capsule. More importantly, malignancy cannot be excluded by histology when liposuction is used to remove a giant lipoma.

The diagnosis of a breast lipoma is not usually easy but can be made if the condition is borne in mind and a careful history and clinical examination is carried out.

REFERENCES


