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Case Report

Surgery Section

Giant Fibroadenoma Mimicking Phyllodes

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ABSTRACT

Fibroadenoma which is more than 5 cm is called giant fibroadenoma.The giant fibroadenoma is an uncommon variant (4%) of fibroadenoma characterized by rapid growth. Giant fibroadenoma can distort the shape of breast and causes asymmetry, so it should be excised. Fortunately, majority of these tumours can be completely excised, preserving the nipple and areola, as was done in our patient. We report a case of giant fibroadenoma in 18years old female, which distorted the shape of breast and was mimicking phyllodes.

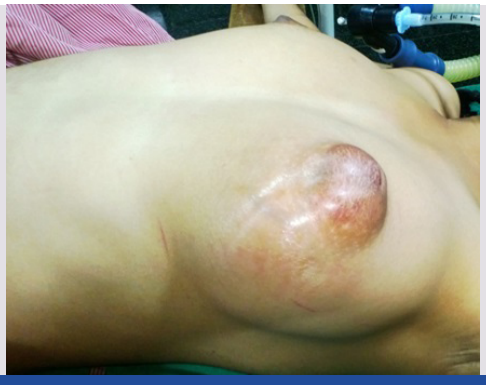
Key Words: Breast, Giant fibroadenoma, Phyllodes tumour

INTRODUCTION

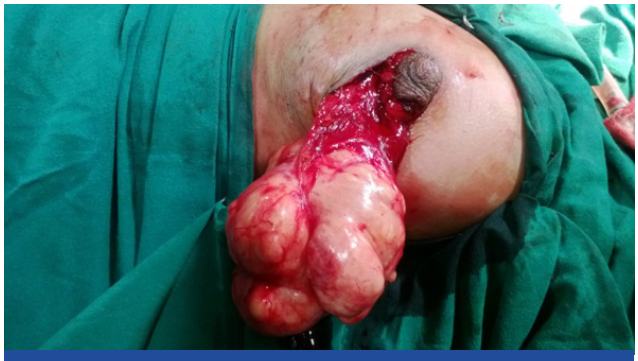
Giant fibroadenoma is a rare pathology usually presenting in adolescence characterized by massive and rapid enlargement of the breast. Distinguishing it from cystosarcoma phyllodes preoperatively is difficult, but important, as they have a different therapeutic approach and different follow-up [1]. Fibroadenomas are most commonly (68%) encountered breast mass in adolescents and are believed to be caused by an abnormal response to estrogen. They typically present as rubbery, discrete, nontender mass, and may be lobular, bilateral (10%), or multiple (10% to 15%) [2]. The most common location is the outer upper quadrant of the breast [3]. We report a case of giant fibroadenoma in an 18 years female, which distorted the shape of left breast, mimickingphyllodes tumour, She underwent excision of lump without any complications.

CASE REPORT

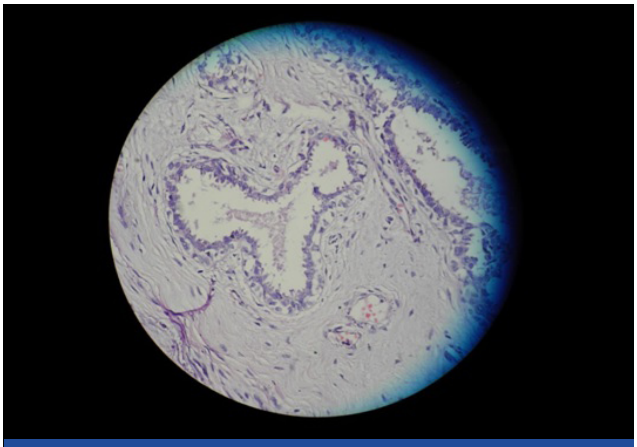
An 18-year-female presented to the outpatient department with history of lump in left breast of one year duration. One year back showed to local doctor, diagnosed to have fibroadenoma and was reassured. Since then swelling rapidly increased to present size. On examination, left breast size was larger than right. Skin was stretched over lower outer quadrant lump, measuring 12×9cm, dilated veins present over lump, firm in consistency, not fixed to skin, chest wall or breast tissue [Table/Fig-1]. Ultra sonogram of breast showed features suggestive of fibroadenoma. Fine needle aspiration cytology of lesion suggestive of fibroadenoma, underwent excision of lump by periareolar incision. Intraoperatively, lump was lobulated [Table/Fig-2]. Lump was excised completely, drainplaced. Wound closed with subcuticular sutures. Drain removed on 2nd postoperative day, wound healed well. Histopathology was reported as proliferating duct and fibrous stroma in a predominantly intracanalicular pattern, some ducts show apocrine change [Table/Fig-3] suggestive of giant fibroadenoma.



[Table/Fig-1]: Left breast lump which distorted the shape of breast



[Table/Fig-2]: Intraoperative photograph of lobulated lump



[Table/Fig-3]: Histopathological picture suggestive of giant fibroadenoma

DISCUSSION

Giant fibroadenomas are usually encountered in pregnant or lactating women. When found in an adolescent girl, the term juvenile fibroadenoma is more appropriate [4]. However, giant fibroadenomas are benign lesions that do not undergo transformation into malignancy [5]. Peak incidence occurs in late adolescence, in African-American females at increased risk. The underlying mass may cause a major distortion to the breast contour [6]. Histologically, giant fibroadenomas are to be differentiated from cystosarcoma phyllodes by the lack of leaf-like structures and stromal cell atypia and from asymmetric breast hypertrophy in girls by the lack of mammary lobules [7]. Giant juvenile fibroadenoma may recur after complete excision, but the chance of recurrence becomes less after third decade [8]. Phyllodes tumour of breast is an uncommon fibro epithelial tumour with an epithelial and more cellular stromal component. They occur in all age groups, but are uncommon in adolescent, and are more likely to occur in women over 35 years [9]. Phyllodes tumour can be benign, borderline or malignant depending on histological features including stroma, cellularity, mitotic activity, and infiltration along tumour border. It is treated by wide excision with a margin of normal tissue or mastectomy.

CONCLUSION

Understanding various breast pathologies, a complete physical examination and diagnostic evaluation is needed, to reassure the patient and the parents as well, to avoid missing any rare malignant lesion.

REFERENCES

[1] Dehner LP, Hill DA, Deschryver K. Pathology of the breast in children, adolescents, and young adults. *Semin Diagn Pathol.* 1999 Aug; 16(3): 235-47.

[2] Arca MJ, Caniano DA. Breast disorders in the adolescent patient. *Adolesc Med Clin.* 2004 Oct; 15(3): 473-85.

[3] West KW, Rescorla FJ, Scherer LR III, Grosfeld JL. Diagnosis and treatment of symptomatic breast masses in the pediatric population. *J Pediatr Surg.* 1995 Feb;30(2):182-86, discussion 186-87.

[4] Haagensen CD. Disease of the breast. 3rd ed. Philadelphia, Pa: *W.B. Saunders;* 1996. 267–83.

[5] Pike AM, Oberman HA. Juvenile cellular adenofibromas. *Am J Surg Pathol.* 1985; 9:7305.PubMed.

[6] Fallat ME, Ignacio RC Jr. Breast disorders in children and adolescents. *J Pediatr Adolesc Gynecol.* 2008 Dec; 21(6): 311-16.

[7] Anavi BL, Mishev GG, Ivanov GP. Giant fibroadenoma of the breast. *Folia Med (Plovdiv).* 2002; 44(4): 50-52.

[8] Liang MI, Ramaswamy B, Patterson CC, McKelvey MT, Gordillo G, Nuovo GJ, et al. Giant breast tumors: surgical management of phyllodes tumours, potential for reconstructive surgery and a review of literature. *World J Surg Oncol.* 2008; 6:117.

[9] Wurdinger S, Herzog AB, Fischer DR, Marx C, Raabe G, Schneider A, et al. Differentiation of phylloides breast tumorsfrom fibroadenoma on MRI. *AJR Am J roentgenol.* 2005; 185: 1317-21.

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