

BILATERAL GIANT BREASTS IN AN ADOLESCENT FEMALE

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SUMMARY

Giant fibro-adenoma (Cystosarcoma phylloides) in a girl of 13 years of age is being presented because of its extreme rarity. It is highly probable that the rapid growth of these tumours in the pubertal phase of adolescent females is due to either excessive oestrogen stimulation or lack of its antagonists. The present case has been followed-up for two years and there has been no recurrence or any problem after surgery.

Since Muller's (1938) original description of giant tumours of the breast as a distinct entity from carcinoma numerous reports and reviews of this rare and interesting tumour have been published in the literature.

Case Report

A 13 year old girl presented with massive enlargement of the left breast (Fig. 1). She noticed a small lump about 2 years ago which kept on growing slowly for about $1\frac{1}{2}$ years. During the last 6 months i.e. prior to admission it started increasing rapidly and caused discomfort and worry. There was history of irregular menstrual cycle. There was no history of hormonal treatment or family history of similar breast disease.

On examination the tumour was found to involve the whole of left breast. The skin was shiny and the veins were dilated. The maximum diameter of the left breast was 21.7 cm. The lump was well defined nodular, firm in consistency and freely mobile within the breast. There was no tethering to the nipple. The right breast was also enlarged and on examination revealed a lump of 8 cm \times 6 cm nodular, firm in consistency and freely mobile in the breast. Axillary and clavicular lymph nodes were not enlarged. Chest X-ray was normal.

Reduction mammoplasty of the left breast was done first, using Biesenberger's technique

and the right breast was operated about 3 months later (Fig. 2 and 3). The tumour was well encapsulated and there was no difficulty in excising it. The cut surface was smooth and gelatinous with areas of necrosis and scattered cysts. Biopsy report was Cystosarcoma phylloides (Fig. 4). The patient has been followed up for two years and is trouble free.

Pathology

Usually the tumours are well encapsulated. Although the tumours vary in size, a large size per se can not be considered as a sign of malignancy. The tumours in general show a variegated pattern both in colour and in consistency, the colour varying from yellow to greyish white. Macroscopically the tumours are well demarcated, noninvasive, smooth and often lobulated with considerable variation in size. The cut surface is smooth and gelatinous but there may be areas of necrosis and haemorrhage or scattered cysts. Microscopically there is increase in the connective tissue and epithelial proliferation which causes clefts and gives it the leaf like appearance (Phylloid) described by Muller. The cellularity of the stroma may vary from one part of the tumour to another. Some may turn malignant and this is shown by increased cellularity and anaplasia in the stromal element with nuclear pleomorphism and mitotic activity.



Fig. 1. Showing massive enlargement of the left breast in a girl of 13 years.

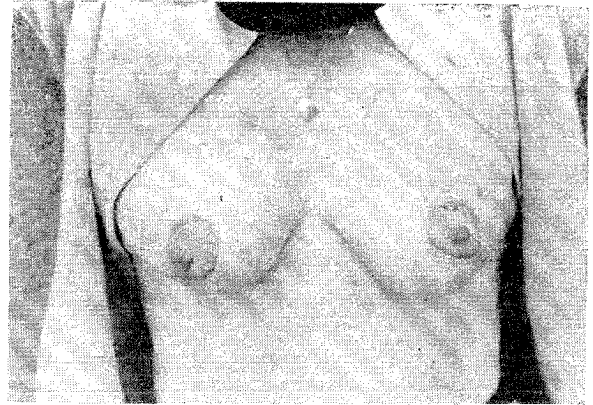


Fig. 2. Showing the post-operative appearance (front view).

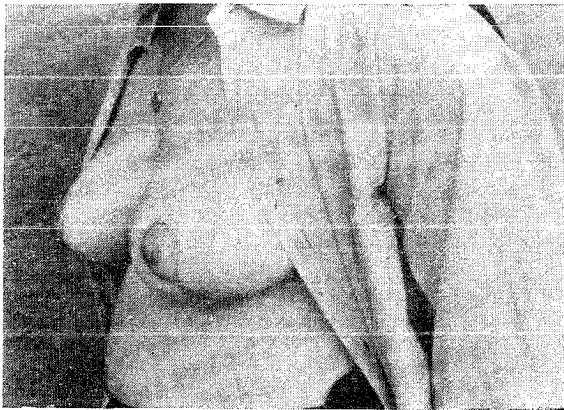


Fig. 3. Showing the post-operative appearance (side view).

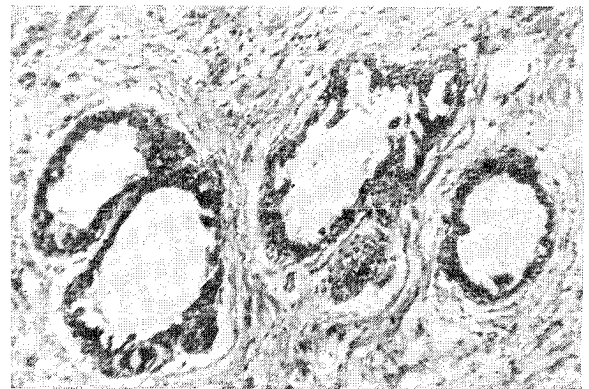


Fig. 4. Showing the histopathologic appearance in the case.

Discussion

The overall incidence of giant tumours of the breast is low. These tumours have their highest incidence in the third and fourth decades. McDivill et al. have drawn attention to the extreme rarity of these tumours in the adolescent age group. Wulsin (1960) reviewed the incidence of large breast tumours in adolescent females from 1927 to 1960 and found only 26 cases.

Much confusion exists in the literature as regards the terminology of these tumours. When Muller (1938) first described these tum-

ours he used the term *Cystosarcoma phylloides* and believed that the lesions were perfectly innocent. Halkier and Ohlsen (1954) described them as variants of the usual fibro-adenomas. Harrington (1950) defined *Cystosarcoma phylloides* as a huge tumour of the breast which is benign fibro-adenoma in 90 percent of cases and fibrosarcoma in 10 percent. Large fibro-adenomas are often called *Cystosarcoma phylloides* on the basis of size alone. The term *Cystosarcoma phylloides* has been used by clinicians to cover all types of these tumours irrespective of age to avoid misunderstanding.

REFERENCES

1. AMERSON, J. R.: Cystosarcoma phylloides in adolescent females—a report of seven cases. *Ann. Surg.* 1970; 171: 849-856.
2. ASHIKARI, R., and FARROW, J. H.: Fibro-adenomas in the breasts of juveniles. *Surg. Gynecol. Obstet.* 1971; 132: 259-262.
3. BLOCK, G. E. and ZLIANTNIK, P. A.: Giant fibro-adenomata of the breast in a pre-pubertal female. *Arch. Surg.* 1960; 80: 665-669.
4. BOYD, N.: "A text book of pathology"; 8th Edition, Henry Kimpton, London, 1970; p. 1015.
5. GUPTA, S. and GUPTA, I. M.: Cystosarcoma phylloides. *Ind. J. Surg.* 1973; 35: 551-554.
6. HINES, J. R. and GEURKINK, R. E.: Giant breast tumour in the adolescent. *Ann. J. Surg.* 1965; 105: 810-812.
7. MARKOWITZ, B. and HOWELL, H. L.: Rapid growth of a large breast fibroma in a young girl. *J. Amer. Med. Assoc.* 1936; 107: 1043-1044.
8. McDONALD, J. R. and HARRINGTON, S. W.: Giant Fibro-adenoma of the breast, "Cystosarcoma phylloides". *Ann. Surg.* 1950; 131: 243-251.
9. ROSS, D. E.: Cystosarcoma phylloides in a young girl. *Amer. J. Surg.* 1952; 84: 728-733.
10. TURNBULL, A. and FRAZER, J.: Cystosarcoma phylloides. *J. Roy. Coll. Surg. Edinburg*, 1974; 19: 104.
11. WULSIN, J. H.: Large breast tumours in adolescent females. *Ann. Surg.* 1960; 152: 151-159.

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