CASE REPORT

Prepubertal Bilateral Giant Fibroadenoma of Breast with Ulceration: A Case Report

Tejaswini Vallabha^{1*}, Vijaykumar Ishwarappagol¹, Basavaraj Narasanagi¹, Vikram Sindgikar¹, Vijayalaxmi Patil², R.M.Potekar²

¹Department of Surgery, ²Department of Pathology, BLDE University's Shri B. M. Patil Medical College & Research Centre, Vijayapura-586103 (Karnataka) India

Abstract:

Breast masses are uncommon in childhood. Juvenile fibroadenoma is a rare clinical entity and forms 4% of the total fibroadenomas, and giant juvenile fibroadenoma constitutes only 0.5% of all fibroadenomas. A rare case of bilateral juvenile giant fibroadenoma of breasts in a pre pubertal child who developed mass related complications of ulceration, bleeding and backache is reported here.

Keywords: Prepubertal Fibroadenoma; Giant Fibroadenoma; Bilateral Giant Fibroadenoma; Juvenile Fibroadenoma

Introduction:

Juvenile fibroadenoma is a rare clinical entity and forms 4% of the total fibroadenomas, and giant juvenile fibroadenoma constitutes only 0.5% of all fibroadenomas [1,2]. Bilateral giant juvenile fibroadenomas are extremely rare in prepubertal girls. A juvenile fibroadenoma is considered "giant" if it is greater than 5 cm, 500 g, or replaces at least 80% of the breast [3]. We report such a case who presented to us with bilateral juvenile giant fibroadenomas with ulceration, bleeding from ulceration and backache due to weight of both breasts.

Case Report:

A 12 year old pre pubertal girl presented with enlargement of bilateral breasts since 1 year. She complained of mild pain due to sagging, with bleeding ulcer over right breast in past few weeks.

On examination, huge enlargement of bilateral breasts with ulceration and mild bleed from right breast was noted (Fig.1). Both breasts had soft to firm large lobulated masses causing huge enlargement of both breasts. There was no axillary lymphadenopathy. Routine hematological, biochemical investigations and chest X ray were within normal limits. The FNAC of both breasts showed features suggestive of bilateral juvenile fibroadenoma. She underwent bilateral total excision of breast lumps with conservation of the normal breast tissue, nipple and areola with uneventful recovery. The excised right lump measured 15x12cms, weighed 750gms and left lump was 14x12cms, weighed 600gms. (Fig. 2) The histopathology reports were bilateral juvenile giant fibroadenomas.



Fig. 1: Huge Bilaterally Enlarged Breasts with Ulceration

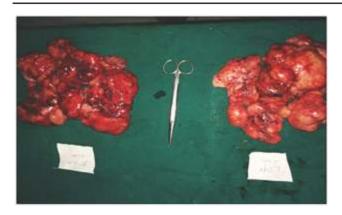


Fig. 2: Operated Specimens of Giant Lobulated Fibro Adenomas of Both Breasts

Discussion:

Breast masses are uncommon in childhood. Majority of them are related to inflammation or benign tumors like fibroadenomas [4]. Stanford School of Medicine describes juvenile fibroadenoma of the breast as circumscribed, often large breast mass usually occurring in adolescent females with stromal and epithelial hypercellularity but lacking the leaf like growth pattern of phyllodes tumors [5]. Giant juvenile fibroadenoma is an uncommon tumour presenting

in adolescent females and the exact etiology is not known. Hormonal influences are thought to be contributing factors [6]. Excessive estrogen stimulation and/or receptor sensitivity or reduced levels of estrogen antagonist during puberty have been implicated in the pathogenesis [6, 7]. They typically present as firm, mobile, painless, easily palpable breast nodule mainly seen before 30 years of age. Giant juvenile fibroadenoma causes rapid and massive enlargement of the breast in adolescent and is an uncommon tumour. They can grow to immense proportions, compressing and displacing normal breast tissues and stretching and displacing the overlying skin and nippleareola complex. The utility of mammography is limited. Ultrasonography is the most common method of evaluation if need be. Lumpectomy with preservation of compressed normal breast tissue is the preferred treatment. Mastectomy as a treatment modality for giant fibroadenomas has been debated but is commonly reserved for unusual or recurrent cases [2] and may need reconstructive surgery.

References

- 1. Moore RL, Mungara A, Shayan K, Wallace AM. Bilaterally symmetric juvenile fibroadenomas and tubular breast deformity in a prepubescent girl. *J Pediat Surg* 2007; 42(6):1133-36.
- 2. Park CA, David LR, Argenta LC. Breast asymmetry: presentation of a giant fibroadenoma. *Breast J* 2006; 12(5):451-61.
- 3. Jayasinghe Y, Simmons PS. Fibroadenomas in adolescence. *Curr Opin Obstet Gynecol* 2009; 21:402-6.
- 4. Pettinato G. Manivel JC, Kelly DR Wold LE, Dehner LP. Lesions of the breast in children exclusive of typical

- fibroadenoma and gynecomastia. A clinicopathologic study of 113 cases. *Pathol Annu* 1989; 24(Pt 2):296-328.
- Kempson RL, Rouse RV. Juvenile fibroadenoma of the breast. Stanford School of Medicine, http://surgpathcriteria.stanford.edu/breast/juvfibroade noma/.accessed on 28/9/2016.
- 6. Musio F, Mozingo D, Otchy DP. Multiple, giant fibroadenoma. *Am Surg* 1991; 57(7): 438-41.
- 7. Gobbi D, Dall'Igna P, Alaggio R, Nitti D, Cecchetto G. Giant fibroadenoma of the breast in adolescents: report of 2 cases. *J Pediatr Surg* 2009; 44(2): e39-41.

*Author for Correspondence: Dr. Tejaswini Vallabha, Department of Surgery, BLDEU's Shri. B M Patil Medical College & Research Centre, Sholapur Road Vijayapur, Karnataka Email: tejaswini.vallabha@bldeuniversity.ac.in Cell: 9900777645