Case Report

Fibroadenoma in male breast: Case report and review

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ABSTRACT

Fibroadenoma is very common in females, but rare in male breast. Gynecomastia and/or lobular differentiation have been known to coexist in both types of fibroepithelial lesion in men. We report a young adult having gynecomastia associated with fibroadenoma.

Key words: Fibroadenoma, gynecomastia, male breast

INTRODUCTION

Idiopathic gynecomastia is a benign proliferative lesion of male breast and may present as a diffuse bilateral process or a unilateral discrete mass. Gynecomastia is usually present in teenaged male. This is due to hormonal changes during puberty. Gynecomastia is rarely accompanied by fibroadenoma. Breast fibroadenoma in male breast is rare even in presence of gynecomastia due to absence of lobules.[1] Bilateral fibroadenoma with digital fibroma like inclusion in male breast can occur rarely in male undergoing hormonal treatment for prostatic cancer.[2] These breast masses should be distinguished from clinically suggestive carcinoma breast.[3] Hereby, we present a case of idiopathic gynecomastia with fibroadenomas of left breast in young adult man.

CASE REPORT

A 23-year-old young gentleman reported in outpatient department with swelling of left breast for the last 4 years. He wanted removal of swelling for cosmetic reason. On examination, left breast was enlarged [Figure 1]. Breast was enlarged and was nontender. It was having a small hard lump with rubbery feel. The lump was mobile. This mobile lump measured 4 cm × 3.5 cm in size. Patient was diagnosed to have gynecomastia, which was excised and was sent for histopathological examination. Report turned out as fibroadenoma of male breast [Figure 2].

Access this article online	
Quick Response Code:	Website: www.ccij-online.org
	DOI: 10.4103/2278-0513.152754

DISCUSSION

In male breast incidence of gynecomastia is 45.5%, ductal cancer 18.2%, lipoma 12.1% and rest about 24% accounts fore, e.g. cystic hygroma, cystic mastopathy, fibroadenoma, ductal papilloma, tuberculosis, periductal mastitis, primary primitive neuroectodermal tumor. Fibroepithelial lesions are uncommon in the male breast. Gynecomastia and/or lobular differentiation have been known to coexist with male fibroadenoma and phyllodes tumor.[2] As there are no lobules in male breast, and hence fibroadenomas and cystosarcoma phyllodes are rarely found in male breast.

Even occurrence of fibroadenoma in male breast is questioned in literature according to Holleb *et al*.[4] According to others authors fibroadenomas are poorly documented or appear to be nodular foci of gynecomastia.[5] Nonetheless, fibroadenomas in the male breast have been documented sporadically in the medical literature as single case reports and in a rare series of four patients.[6,7]

Usually lobular development precedes biphasic tumors in male breast. The development of lobules apparently requires a certain length and or intensity of endogenous or exogenous estrogenic stimulation not frequently attained at

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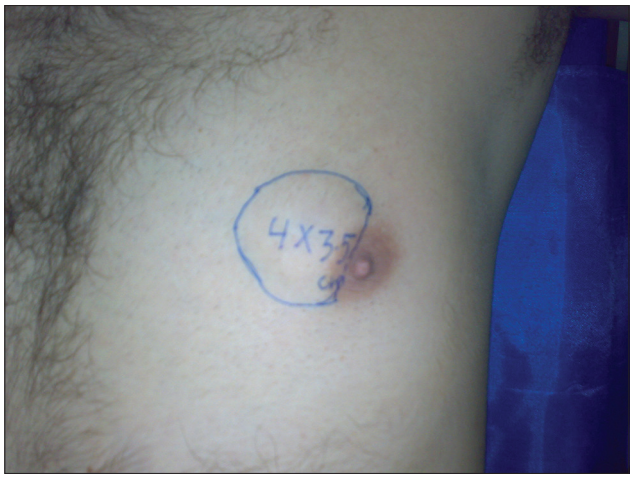

Figure 1: Patient showing swelling of left breast

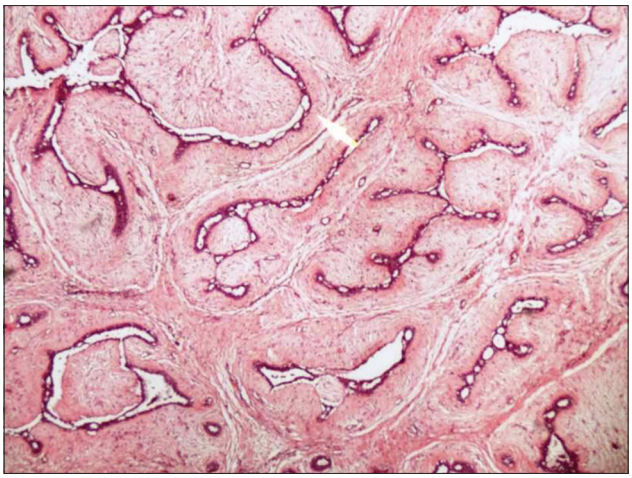

Figure 2: Intracanaluculi fibroadenoma breast

the levels that commonly induce gynecomastia.[8] Multiple or bilateral fibroadenomas have not been reported in male breast.[2] Hormonal imbalance, some due to medication use, cause proliferative changes in male breast, such as gynecomastia, lobular differentiation, and fibroepitheilial lesions. Although, coexisting gynaecomastia appears to be consistent finding in male patient with fibroadenma, the presence of lobular differentiation with or without associated gynecomastia is less common.[6,9] It is known that the slight increase in plasma estrogen ratio observed in idiopathic prepubertal or senile gynecomastia, usually will not induce acinar and lobular formation in male breast[10,11] but full acini's and lobular formation will occur in transsexual in whom progestrogenic antiandrogens are combined with feminizing estrogen therapy.[6,12] Hence usually, exogenous drugs/medications leading to development of gynecomastia or fibroadenma or both in male breast, but very rarely these can develop even without exogenous drugs or medication as in our case. Even prolonged use of spirolactone in digitalized male patients, can result in development of fibroadenomatoid hyperplasia.[13]

Two male patients who were treated with ethinyloestradiol and ciproterone acetate for demasculinization and feminization developed lobular differentiation in breast.[6,14] Ciproterone acetate is a progestagenic, which is a strong androgen receptor-blocking effect.[6,12]

In the series cited by Ansah-Boateng and Tavassoli, four males were having lobular differentiation in their breast along with gynecomastia.[1] Two patients were on drugs while other two patients were not taking any medications at the time of diagnosis.[8]

In another report, a 69 years male developed enlargement of breast with multiple fibroadenomatoid nodules as he was taking digoxin, furosemide, and spironolactone for the last 4 years.[14] Even a 19-year-old woman with complete androgen insensitivity syndrome who was taking exogenous estrogen was reported to develop a juvenile fibroadenoma.[7]

Since gynecomastia is often coexistent in reported cases of fibroadenomas, it is difficult to discern whether exogenous drugs/medications leading to hormonal imbalances are causative of one or both lesions. A 40-year-old male never used any drug still developed fibroadenoma in his breast[13] as in our case.

Presenting clinical features are enlarged breast with painful nodule. Diagnosis can be confirmed with fine-needle aspiration cytology or by histopathology examination after excisional biospsy. Due to cosmetic reasons, gynecomastia is always excised.

CONCLUSION

Male patient with breast enlargement usually present late due to social stigma and also due to ignorance, so, usually treatment is delayed and always be distinguished with male breast carcinoma.

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Cite this article as: Goyal S, Goyal S, Trikha A. Fibroadenoma in male breast: Case report and review. Clin Cancer Investig J 2015;4:220-2.

Source of Support: Nil, **Conflict of Interest:** None declared.