

Bilateral Multiple Fibroadenomas on Fnac – A Case Report



Medical Science

KEYWORDS : Multiple fibroadenoma, bilateral breasts, Fibroadenoma, mastectomy, biopsy, FNAB, ultrasonography

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ABSTRACT

Fibroadenomas are among the most common tumours of the female breast, occurring most frequently in women of child-bearing age, especially those under 30 years. (1)

Multiple fibroadenomas are not uncommon. But the presence of more than four fibroadenomas in one breast with recurrences at different time periods is rare. . A case of multiple, bilateral and fibroadenomas in a 19-year-old nulliparous female who is still on clinical follow-up is presented.

Introduction

Fibroadenomas are among the most common tumours of the female breast, occurring most frequently in women of child-bearing age, especially those under 30 years. Most present as single mass, however the presence of multiple fibroadenomas can be seen in 15–20% of patients.[1,2,3,4,5] It has been reported that the average number of masses in cases of multiple fibroadenomas is typically 3–4 in a single breast but occurrence of more than five fibroadenomas in an individual patient is much less common (1,2,3,4)

Case Report

A 19-year old woman presented with multiple lumps in both breasts which she first noticed 5 year earlier. Operated for the same 5 years back.

She had not been exposed to any chemicals or harmful materials and had never taken medications. The family history was otherwise unremarkable.

Physical examination revealed two enlarged breasts with symmetrical nipples and no retraction or haemorrhage. The overlying skin was normal, not associated with any lymphadenopathy. Within the breasts, there were many palpable, non-tender masses throughout all quadrants, ranging from less than 1–5 cm in size. The masses were well circumscribed with regular margins, smooth surfaces, firm in consistency, and mobile. There were no other lumps.

Ultrasonography showed solid masses in bilateral breasts that had a distinct, clear envelope like appearance and relatively uniform echoes. Mammography of both breasts showed multiple well defined round to oval lobulated masses in both breasts

Fine needle aspiration cytology showed monolayered sheets of benign duct epithelial cells with bare nuclei.

Routine laboratory testing including sexual hormone level showed no abnormality.

Surgery was not recommended to avoid multiple unpleasant scars .

We recommended the patient self examination and close clinical follow-up.

Discussion

Most fibroadenomas are present as single mass, however the presence of multiple fibroadenomata can be seen in 15–20% of the patients. It has been reported that the average number

of masses in cases of multiple fibroadenomas is 3–4 in a single breast but occurrence of more than five fibroadenomas in an individual patient is much less common.(12,3,4,6,7.)

Most fibroadenomas present as a single mass, although the presence of multiple fibroadenomas can be seen in 15–20% of the patients.1 Unlike women with a single fibroadenoma, most of the patients with multiple fibroadenomas have a strong family history of these tumours. (1,2,4,5,7,8,]

The aetiology of multiple breast fibroadenomas has not yet been clearly established. A possible connection between multiple fibroadenomas and oral contraceptives was proposed but has not been well investigated yet.(3,4,6) Other possibilities include imbalance of in vivo oestrogen levels, hypersensitivity of local breast tissue to oestrogen, dietary factors, or inherited predisposition.5 The increased sensitivity to oestrogen may subsequently lead to mammary gland hyperplasia and even the development of carcinoma. A study of a large cohort of women with fibroadenoma revealed that the overall prevalence of atypical epithelial hyperplasia within fibroadenomas was 0.81% and only around 7% of women with atypia developed invasive carcinoma on follow-up.(1,6,8.) Therefore, patients with fibroadenomas may have a slightly increased risk of developing breast cancer. The pathogenesis of formation of the numerous breast fibroadenomas in this patient is unknown.

(1,2,3,4,6,8,)

With increasing age, the risk of carcinomatous degeneration in fibroadenomas rises to 17%.7 This necessitates excision of all such tumours. The surgical treatment of choice of fibroadenoma is breast conserving, however multiple fibroadenomas pose a particular challenge. In 1971, Liacyr Ribeiro described his new technique for reduction mammoplasty. Four years later, the first 20 cases were published. This technique was introduced by Rezaei in oncological surgery. With free hand design, preoperative marking is performed and the inferior pedicle modulated. Multiple fibroadenomas of the breast are safely removable with the Ribeiro technique modified by Rezaei. 1

The suggestion about the ideal treatment of such cases is controversial. There are no reports to detail the benefits of antiestrogens in juvenile fibroadenoma. (3,6,7,8,) Some authors advocate local excision of the individual lesions as they appear with emphasis on preserving sufficient breast tissue, but this could lead to undesirable scarring, especially in young patients with a tendency to formation of hypertrophic scars.

As frequent recurrences of her fibroadenomas, enlargement of the

previous ones, multiple scars resulting in breast deformity and her family history of breast cancer, we recommended this young and nullipare patient close clinical follow-up

The surgical treatment of choice of fibroadenoma is breast conserving (1,3,4)

In conclusion, multiple fibroadenomas of the breast are safely removable with the Ribeiro technique modified by Rezai.

Conclusion:-

There is scant literature regarding multiple fibroadenomas in bilateral breasts.

The aetiology of multiple breast fibroadenomas has not yet been clearly established. A possible connection between multiple fibroadenomas and oral contraceptives was proposed but has not been well investigated yet.

Multiple fibroadenomas of the breast are safely removable with the Ribeiro technique modified by Rezai.

[1] Sangram Keshari Panda, Byomokesh Figure 1} Microphotograph tightly cohesive sheets of monomorphic ductal epithelial cells .

(H & E stain , 10 x) .

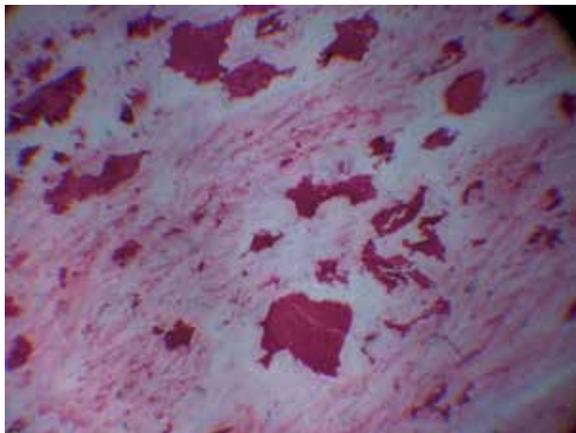
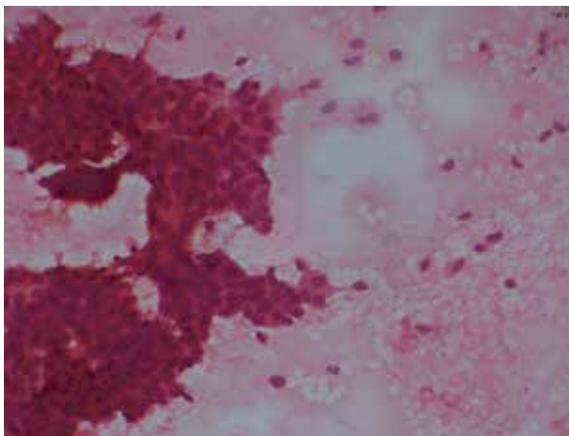


Figure 2} Microphotograph showing tightly cohesive clusters of monomorphic ductal epithelial cells and bipolar bare nuclei . (H & E stain , 40 x) .



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