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Fibrocystic Breast Tumor: A Case Report

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Abstract: Fibrocystic breast tumor is the most common benign type of breast diseases that affects millions of women worldwide. Fibrocystic breast changes are classified as non-proliferative, proliferative without atypia, or proliferative with atypia. We reported a 34-year-old woman presented with a right breast evaluation of breast tumors since one year before admission. On examination, a solid and hard breast tumor measuring 15x10 cm was palpable, well-defined, tender, mobile, and no nipple discharge. The patient underwent two times of core biopsy and the results were fibrocystic changes. Although clinically the breast tumor had a malignant appearance, but the results of core biopsy examinations revealed fibrocystic changes. The patient was managed by wide excision of the evaluated breast tumor with preservation of the breast skin and nipple areolar complex to maintain its function and aesthetic. In conclusion, evaluation of breast tumors must go through a triple diagnostic procedure namely clinical, imaging, and histopathological examinations. Fibrocystic breast tumor can be managed with wide excision of the tumor with preservation of the skin structure and nipple areolar complex of the breast to achieve a natural aesthetic.
Keywords: fibrocystic breast tumor; wide excision of tumor; evaluation of breast tumors

INTRODUCTION

World Health Organization (WHO) classification of breast tumors is divided into invasive breast cancers, precursor lesions, lesions of low malignant potential, benign epithelial proliferations, fibroepithelial, myoepithelial and mesenchymal neoplasms.[1] Fibrocystic breast tumour is the most common benign type of breast disease affected million of women worldwide. It is most common in women between the ages of 30 to 50 years old.[2]

The disease process has a wide spectrum and includes both fibrous and cystic changes in the breast tissue. The cyst can vary from micro to large macrocyst, single or multiple. The cyst formation is as a result of fibrosis in breast tissue development and this process is triggered by overproduction of estrogen and suppression of progesterone leading to hyperproliferation of the connective tissue and causing increased epithelial thickness.[3-6]

Fibrocystic breast changes are classified as nonproliferative, proliferative without atypia, or proliferative with atypia. A nonproliferative type is benign disease process, while atypia (atypical ductal hyperplasia) in fibrocystic disease does have a malignant potential.[3,4,7] Atypical ductal hyperplasia (ADH) is an intraductal cell proliferation, having the same cytological and architectural features as low-grade intraductal carcinoma, which involves from a minimum of a part of one duct, to a maximum of two to three ducts or to a maximum of 2 mm in major diameter. Atypical ductal hyperplasia is associated with a 4–5 times relative risk of developing breast cancer in the ensuing 10 to 15 years after the diagnosis.[7-9]

CASE REPORT

We reported a 34-year-old woman presented with a right breast tumor since one year before admission. She claimed that initially the lump was small, but was gradually getting larger without weight loss. Her last menstrual period was a month before presentation. She was P2A0 and never used any intrauterine device or contraceptive pills. She denied a family history of breast disease. On examination, she was not pale or clinically ill-looking, afebrile, and anicteric. The breasts on inspection were asymmetrical with the right breast larger than the left one, redness of skin, however, the nipples and areolae were normal. On palpation, the lump was a solid and hard tumor measuring 15x10 cm, well-defined, tender, mobile, and no nipple discharge. There were no clinically palpable ipsilateral lymph nodes. The left breast was essentially normal (Fig. 1). The patient underwent two times of core biopsy examinations and the results were fibrocystic changes. The patient was managed by wide excision of the evaluated breast tumor with preservation of the breast skin and nipple areolar complex to maintain its function and aesthetic (Fig. 2 and Fig. 3).

DISCUSSION

The vast majority symptomatic fibrocystic changes present as a palpable breast lump and sometimes characterized by an increase in breast tenderness or pain just prior to menstruation, referred to as cyclic mastalgia.[3,7] In this patient, the chief complaints were the breast lump with increasing size with time, and pain.

The evaluation on breast tumour is performed with triple diagnostic testing, which is a combination of clinical examination, imaging, and excision biopsy. This is essential for all women with a clinical finding, such as a discrete palpable mass.[2] In this patient, clinically the breast tumour had a malignant appearance, the breast lump grew rapidly in one year, and on examination, the tumour was found hard and solid. However, two times core biopsy examinations revealed fibrocystic changes.

The management of a fibrocystic breast tumour is a complete surgical excision to exclude malignancy and prevent the development of advanced neoplasia.[8] In this patient, wide excision of tumour was performed to remove the entire tumour, while preserving the skin structure and nipple areolar complex of the breast to achieve a natural aesthetic.

Various studies have showed a relationship between fibrocystic disease of the breast and breast

cancer.[10,11] Georgescu et al[11] considered the fibrocystic disease as a facultative precancerous lesion.

Figure 1. A 34-year-old female with a right breast lump measuring 15x10 cm

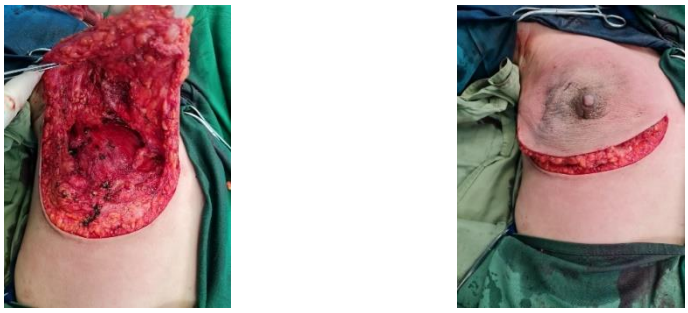

Figure 2. Intraoperative photo. The patient was managed by wide excision of the tumour with skin and nipple areolar complex preservation to maintain cosmetic.

Figure 3. Postoperative photo and tumor mass 15x10 cm

They concluded that the occurrence of mammary cancer in fibrocystic disease following sectorectomy was 7.4 times higher than the mammary cancer rate in those without fibrocystic disease.[10,11] Therefore, in addition to extensive tumour excision, it is necessary to carry out periodic patient evaluation with mammogram examinations every six months.[2]

CONCLUSION

Evaluation of breast tumours must go through a triple diagnostic procedure such as clinical, imaging and histopathological examination. The fibrocystic breast tumour can be managed with wide excision of the tumour with preservation of the skin structure and nipple areolar complex of the breast to maintain its functional and natural aesthetic.

Conflict of Interest

The authors affirm no conflict of interest in this study.

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