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**Case Report**

**CLINICAL STUDY OF A FIBROCYSTIC BREAST PATIENT PRESENTED IN DHQ HOSPITAL SIALKOT, PAKISTAN.**

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**Abstract**

This case report was designed to report an incident of benign breast tissue with fibrocystic change in a 50 years old woman brought to Gujranwala Institute of Nuclear Medicine and Radiotherapy (GINUM) and having 2-3 months of disease history with serious symptoms. With mammography she was diagnosed fibrocystic breast changes and later on fine needle aspiration cytology (FNAC) of the breast was performed. Hence, surgical removal of benign mass was recommended by the consultant oncologist . In DHQ Hospital Sialkot, she undergone a successful surgery. Chemotherapy was suggested for two weeks and she was cured. The effective care of fibrocystic breast change may potentially needs comprehensive assessment for appropriate differential diagnosis. However, the rational therapy and scientific drug monitoring can help to control the fibrocystic breast change. Moreover, consultant oncologists should be careful to detect the exact neoplasm and initiate the treatment to avoid morbidities and mortalitiess

**Key words:-**Fibrocystic changes, Adenosis, Epithelial Hyperplasia, Tamoxifen, Ciprofloxacin.

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**Introduction**

The designation fibrocystic is applied to a miscellany of changes in the female breast that consist predominantly of cyst formation and fibrosis. In the past, these lesions were called fibrocystic disease. However, since most of these changes have little clinical significance beyond the need to distinguish them from cancer, the term fibrocystic change is preferred. [1] Benign mass or mass-like areas occur far more frequently than cancer, at a rate of almost 10:1. [2] Benign epithelial breast lesions can be classified histologically into three categories: nonproliferative, proliferative without atypia, and atypical hyperplasia. The categorization is based upon the degree of cellular proliferation and atypia.[3-12] Proliferative breast conditions are not cancerous, but they increase the risk of breast cancer. [6][13][14] The most common type of proliferative breast condition is hyperplasia. There are two types of hyperplasia: usual hyperplasia (more common) and atypical hyperplasia (less common). In usual hyperplasia (the most common form of hyperplasia) the proliferating (dividing) cells look normal under a microscope. In atypical hyperplasia, the proliferating (dividing) cells look abnormal. Atypical hyperplasia is less common than usual hyperplasia. [6][13][14] It is characterized by noncancerous breast lumps which can sometimes cause discomfort, often periodically related to hormonal influences from the menstrual cycle. [15] When ovarian function stops at menopause, small but significant levels of estrogens are synthesized by the conversion of adrenal precursors to estrone and estradiol. This is accomplished by aromatase enzyme in body fat. Higher levels of body fat are correlated with higher circulating levels of estrogens. [2] There is preliminary evidence that iodine deficiency contributes to fibrocystic breast changes by enhancing the sensitivity of breast tissue to estrogen. [16-17] Intraductalpapillomas of the breast are benign lesions with an incidence of approximately 2-3% in humans. [18] It is the most common cause of bloody nipple discharge. Excision is sometimes performed. Microdochectomy/microdochotomy (removal of a breast duct) is the treatment of choice. [19] Tamoxifen is approved by the FDA for the prevention of breast cancer in women at high risk of developing the disease. [20] Tamoxifen produced 49% reduction in the

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incidence of breast cancer. The preventive effect was noted in pre- and postmenopausal women for invasive and noninvasive breast cancer. [2]

**Case Report**

A 50 years old woman was suffering from fibrocystic breast disease, presented in DHQ Hospital Sialkot, Pakistan. She experienced bloody nipple discharge; and diagnostic tests were made to evaluate situation severity. The mammography showed a low density opacity on retroareolar region. However, no dominant mass, suspicious microcalcifications or areas of architectural distortion seen. Correlative ultrasound showed localized branching dilated ducts (7mm) in retroareolar region. Some of them appeared to contain intraductal lesion measuring about 11x6mm. Fine needle aspiration cytology (FNAC) of breast was performed by using 21G needle and aspirates taken from dilated duct seen in retroareolar region of right breast. Histopathological investigation showed sections contain benign breast parenchymal tissue consisting of lobules and ducts lined by benign double layer of epithelial and myo-epithelial cells. There was focal adenosis, epithelial hyperplasia of usual type and focal cystic change. The stroma revealed fibrosis and focal chronic inflammatory cell infiltrate. No granulomas were seen and there was no evidence of insitu or of invasive malignancy in any of the sections examined. Surgical removal of the benign mass of right breast was held in DHQ Hospital Sialkot, Pakistan.

**Table 1. Three days post-surgical treatment recommended by consultant oncologist.**

Medication	Duration	Dosage form	Frequency
Levofloxacin	3 days	IV Infusion	Once daily
Diclofenac sodium	3 days	Capsule	Once daily
Povidone+iodine	3days	Topical solution	Once daily

After three days she was discharged from the hospital and chemotherapy was prescribed.

**Table 2. Post-surgical chemotherapy recommended for next 2 weeks.**

Medication	Duration	Dosage form	Frequency
Tamoxifen	2 weeks	Tablet	Once daily
Ciprofloxacin	2 weeks	Tablet	Once daily
Diclofenac sodium	2 weeks	Capsule	Once daily
Povidone+iodine	2 weeks	Topical solution	Once daily

**Discussion**

The investigation of fibrocystic breast change demands appropriate patient identification and factors that trigger to exacerbate benign tissue symptoms. The mortality benefit of screening is comparatively greater in women aged 55-70 years. [21-22] The mortality benefit of screening women aged between 40 and 55 is approximately 20%. Screening women under the age of 40 has not been shown to provide any mortality benefit. [21-22] Women with usual hyperplasia have about two times the breast cancer risk of women without a proliferative breast condition. [6][13][14] Women with atypical hyperplasia have about four to five times the breast cancer risk of women without a proliferative condition. [6][13][14] To avoid the decline in health, the patient must follow the therapy and proper monitoring under physician and clinical pharmacist. Home remedies and life style modifications may help the patient to recover efficiently.

**Conclusion**

The effective care of fibrocystic breast change may potentially needs comprehensive assessment for appropriate differential diagnosis. However, the rational therapy and scientific drug monitoring can help to control the fibrocystic breast change. Moreover, consultant oncologists should be careful to

detect the exact neoplasm and initiate the treatment to avoid morbidities and mortalities.

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