

Fibrocystic Changes of Breast

Fibrocystic changes of the breast are a type of benign breast lesion. They occur most often in premenopausal women and can present as bilateral, multifocal breast pain. Diagnosis is made via ultrasound, mammograms, or biopsy. Biopsy can be used to diagnose the various subtypes of fibrocystic changes. These include nonproliferative, sclerosing adenosis, and ductal hyperplasia. Management includes observation, pharmacologic interventions, or surgery.



PLAY PICMONIC

Characteristics

Benign

Benign-Bunny

Fibrocystic changes of the breast are mostly a benign breast disease. However, this may depend on the subtype and degree of cellular atypia.

Premenopausal Women

Pre-man-paws

Fibrocystic changes most commonly occur in premenopausal women 20-50 years old. Though the etiology is generally unknown, it is thought that excess estrogen coupled with a lack of progesterone could lead to fibrocystic changes.

Presentation

Bilateral, Multifocal Breast Pain

Bi-ladder M-Focal Breasts Pain-bolt

A presenting symptom can be bilateral, multifocal breast pain with tender or nontender breast lumps/nodules. There can also be clear or milky nipple discharge.

Diagnosis

Ultrasound

Ultrasound-machine

First line diagnostic procedures include ultrasound and mammography. Ultrasound findings may be normal but otherwise would show thick parenchyma consistent with the fibrous changes and the presence of multifocal cystic lesions (anechoic fluid). A fine needle aspiration (FNA) can be performed to evaluate the tissue further.

Mammogram

Mammoth-graph

Mammograms of patients with fibrocystic changes could show round masses with clear borders and/or calcifications. If there is the presence of a cystic lesion and/or the patient is symptomatic, then a fine needle aspiration (FNA) can be performed.

Biopsy

Biopsy-needle

A biopsy is performed if imaging is inconclusive. Biopsies help to differentiate the histological subtypes of fibrocystic changes: nonproliferative vs sclerosing adenosis vs ductal hyperplasia.

Nonproliferative

Nun-pro-lifter

In the nonproliferative histological subtype, fluid-filled cysts are often evident. If hemorrhage has occurred inside the cyst cavity, it can appear bluish under microscopy ("blue dome cysts").

Sclerosing Adenosis

Skull-Roses with A-dentist

Sclerosing adenosis is a proliferative histological subtype of fibrocystic changes. Stromal fibrosis and acinar proliferation are characteristic in this subtype. If calcifications are present, the risk of breast cancer is increased.

Ductal Hyperplasia

Duck Hiker-plates

Ductal hyperplasia is a proliferative histological subtype. The characteristic features are atypical cells with epithelial hyperplasia. This subtype also has an increased risk of breast cancer.

Management

Observation

Observatory

If symptoms are mild then treatment is usually not warranted.

Pharmacologic Interventions

Med-bottle

If symptoms are severe, then oral contraceptive pills (OCPs), tamoxifen (SERM), or progesterone could be prescribed. These drugs inhibit the excess estrogenic activity that may be contributing to pathogenesis.

Surgery

Surgeon

Some cases are amenable to surgical resection of cysts, especially if they cause refractory pain or significant disfigurement.