

Common Breast Disorders: Diagnosis and Treatment Part 1

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A 25 yo F presents complaining of bilateral breast pain. Pain occurs monthly prior to her menses. She also reports that she has noted multiple “lumps” on bilateral breasts.

Based on her history, what is her diagnosis? Fibrocystic Breast Disease: Classic presentation include cyclic bilateral breast pain more prevalent during the premenstrual phase, pain most frequently located in the upper outer quadrants, increased engorgement and density of the breast along with excessive nodularity, rapid change and fluctuation in size of cystic areas.

How do you treat fibrocystic breast disease?

Support measures: well fitted bra with adequate support for the breast day and night

Dietary measures: 1) Decrease the intake of methylxanthines/caffeine and tobacco, 2) Low fat (15% of calories) and high complex carbohydrate diet. Based on studies, both may be due to placebo effects.

Dietary supplements: 1) Vitamin E: 400 IU BID (inconclusive evidence), 2) Evening primrose oil: 1.5 to 3.0 mg QD has been reported to relieve breast pain in 30 to 80% of women

Medications: 1) *Oral contraceptive pills or supplemental progestins* during the secretory phase of the cycle-40% will have recurrent symptoms after discontinuation 2) *Danazol*: androgenic steroid that inhibits pituitary gonadotropins, ↓estrogen secretion and blocks the effect of estrogen on breast tissue (100 - 400 mg QD but should not be used for more than 6 months. Effective in 50 –90% of patients. Side effects include weight gain, acne, hirsutism, bloating, and amenorrhea. 3) *Bromocriptine*: 2.5 mg BID inhibits prolactin secretion, ↓ breast stimulation and pain. Clinical trial results inconclusive. Not FDA approved for this. 4) *Tamoxifen*: 10-20mg QD ↓pain in about 70% of women with severe mastalgia after 3-6 months in several studies. Not FDA approved for this. 5) *GnRH agonist*: for severe breast pain refractory to other therapies

Surgery: Mastectomy can be performed for intractable pain not relieved by medical therapy

A 24 yof presents with a painless mass on her left breast that she found while bathing and has not increased in size over the last two months. On physical exam, she has a well defined, mobile 3 cm mass in the upper, outer quadrant of her left breast, and no axillary lymphadenopathy.

What is your diagnosis? Fibroadenoma

Fibroadenomas are the second most common type of benign breast disease. They are usually firm, rubbery, freely mobile, solid, usually solitary breast masses. Most frequently present in adolescents and in women in their 20s. Growth is usually slow (av. Size 2.5 cm) and mass does not fluctuate with menstrual cycle nor cause pain. Multiple fibroadenomas can be seen in 15 – 20% of patients. USG or Mammography can be used to help differentiate fibroadenomas from a cyst.

What are treatment options? Controversial. If imaging consistent with fibroadenoma, expectant management with serial ultrasounds every six months can be utilized. Many surgeons recommend a core biopsy prior to expectant management to ensure a correct diagnosis. Excisional biopsies preferred by some but risks include scarring at the incision site, dimpling of the breast from the removal of the tumor, damage to the ductal system of the breast, and mammographic changes. USG guided cryoablation is offered at some centers and side effects include local swelling and bruising. A multicenter trial of 50 pts who had cryotherapy reported the lesions tended to disappear progressively and 75% were not palpable at 12 month follow up.

Do patient with fibroadenomas have an increased risk of breast cancer? Not with simple fibroadenomas. Complex fibroadenoma (tumors that contain cysts greater than 3mm in diameter, sclerosing adenosis, epithelial calcification, or papillary apocrine changes) with multicentric proliferative changes have RR of 3.1 for breast cancer.