FIBROCYSTIC CHANGES OF THE BREAST
See also Breast Masses
See also Mastitis

Background
1. Definition
   - Greater number of cysts or fibrous tissue in an otherwise normal breast
2. General information
   - Common diagnosis in primary care
   - Not considered a disease state
   - Pts can be diagnosed w/ combination of history, physical exam, diagnostic studies
   - Many factors contribute to dz
     - Family hx, hormonal status, age
     - Significant controversy about role of diet in FCB

Pathophysiology
1. Presentations: Divided into two clinical syndromes w/ characteristic age distributions
   - Proliferative
     - Hyperplasia
       - Due to stromal proliferation
       - Tends to occur in women in their 20s
       - Usually asymptomatic, commonly present as pain
       - Upper outer breast and axillary tail
     - Adenosis
       - Resulting from proliferation of glandular cells leading to greater amounts of lobular tissue
       - Develops in the 30s
       - Presents with multiple small breast nodules, 2-10 mm in size
   - Non proliferative
     - Cystic disease
       - Typical of 30-40s
       - Often presents with acute enlargement of one or more cysts
       - Frequently bilateral
       - May cause localized pain
       - Nipple discharge common, pale green to brown in color
2. Incidence, prevalence
   - Estimated >50% of women have Sx in their lifetime
3. Risk factors
   - May include FCBD including family hx, hormonal status, age

Diagnosis
1. History
   - Intermittent pain and tenderness
   - Palpable nodularity or lumps
   - Signs and symptoms tend to vary with menstrual cycle
   - Hormone therapy
2. Physical exam
   - Localized or diffuse tenderness
   - Localized or diffuse lumpiness

3. Diagnostic testing
   - Laboratory evaluation
     - Aspiration cytology, core biopsy
   - Diagnostic imaging
     - For dominant mass: consider mammography, ultrasound, MRI

   possible imaging techniques based on indication

Therapeutics
1. Acute treatment
   - Aspiration of painfully enlarged cyst
   - Acetaminophen or NSAIDs (SOR:A)

2. Further management
   - Cyclical pain and swelling
     - Vitamin A 150,000 IU daily x 3 mos
     - Vitamin E 400 IU daily (SOR:C)
     - Avoid caffeine
       - Evidence of link between caffeine and fibrocystic changes weak (SOR:B)
   - Severe disease
     - Danazol 100-200 mg daily (SOR:A)
     - Tamoxifen 10 mg daily (SOR:A)
     - Side effects and expense limit usefulness of these treatments
   - If cellulitis is suspected
     - Initial trial of antibiotics is recommended
     - However, biopsy should be performed w/in 1-3 wks if problem does not resolve (SOR:C)

Follow-Up
1. Return to office
   - Yearly for exams
   - Recommendation for mammography after benign biopsy
     - Mammograms at 6 mo, 1 yr, and 2 yrs
   - USPSTF recommendations
     - Age <50 yrs: Decision to start regular, biennial screening mammography should be an individual one
       - Take patient context into account
       - Including the patient's values regarding specific benefits and harms (SOR: C)
     - Age 50 to 74 yrs: biennial screening mammography (SOR: B)

2. Refer to specialist
   - Consider breast clinic in difficult cases

Prognosis
1. No association w/incr CA risk
2. Usual risk factors such as family hx do apply
Differential Diagnosis
1. See Breast masses (benign or malignant)
2. Breast cyst
3. Fibroadenoma

Evidence-Based Inquiry
1. For a nonlactating woman with breast inflammation, is a trial of antibiotics appropriate before imaging and/or biopsy?

References
10. U.S. Preventive Services Task Force; Dec 2009
11. U.S. Preventive Services Task Force; Dec 2009

Author: Amy Trelease-Bell, MD, University of Wyoming FPRP-Cheyenne

Editor: Chandrika Iyer, MD, St. John FMRP, Detroit, MI