



general
physician
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Current Management of Benign Breast Disease

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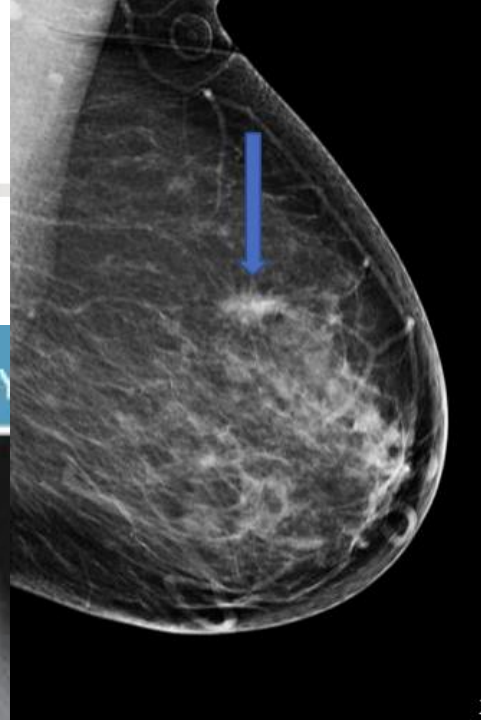
Objectives

- ✓ Breast Density
- ✓ Benign disease
 - ✓ Simple Cysts
 - ✓ Breast Pain
 - ✓ Fibroadenoma
 - ✓ Fibrocystic disease
 - ✓ Nipple discharge
 - ✓ Mastitis and Breast Abscess
- ✓ High Risk lesions
- ✓ Hormone Replacement Therapy
- ✓ Screening Guidelines
- ✓ High Risk patients
- ✓ COVID and breast care

Breast Density

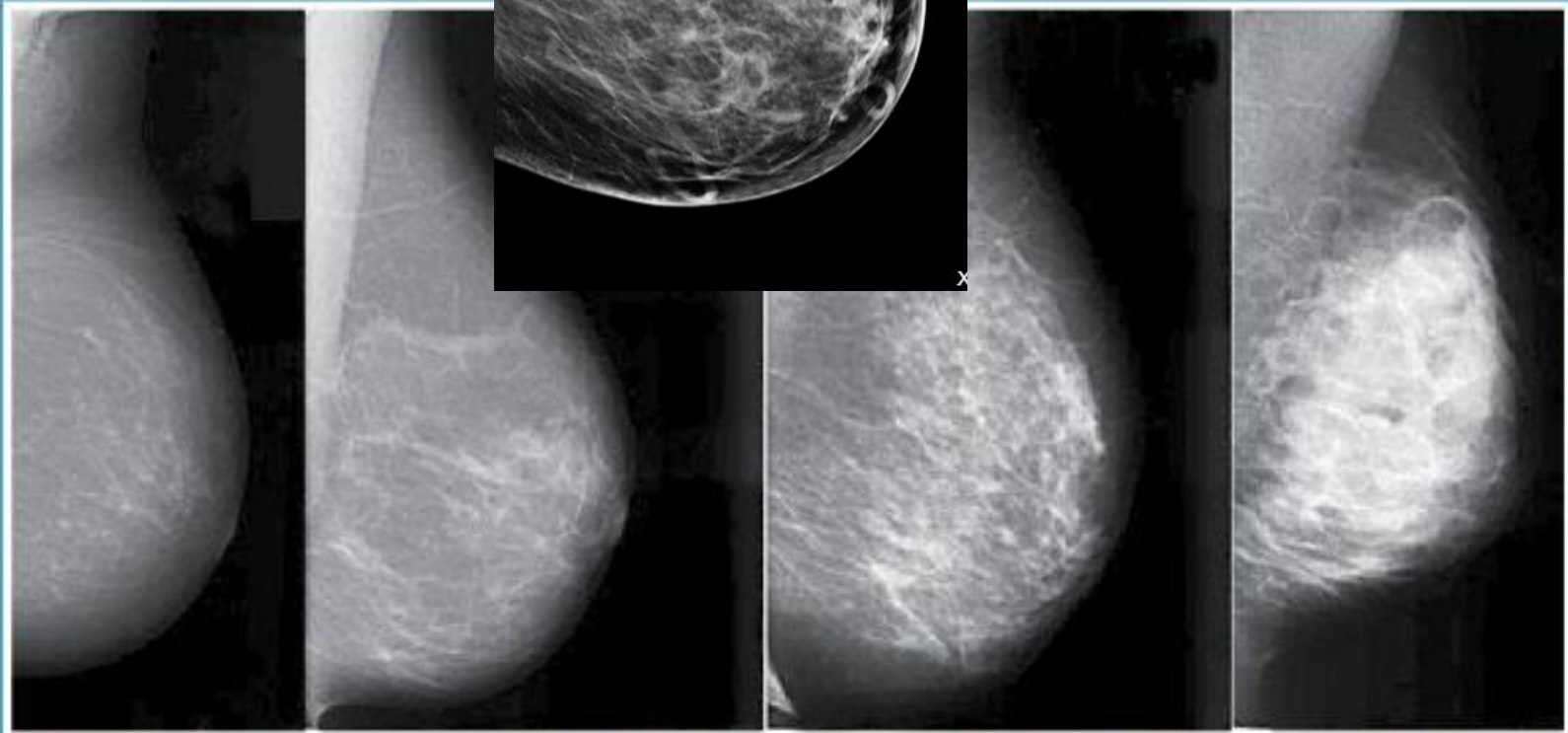
- ✓ A ratio of fat and breast tissue
- ✓ Dense breast = more breast tissue than fat
 - ✓ Common in young women
 - ✓ Common in lactating women
- ✓ Density typically decreases with age
- ✓ Harder to read on Mammogram and generally require more imaging modality to detect lesions (ultrasound ± MRI)
- ✓ Some studies show higher risk of cancer in dense breast patients





RADIOLOGISTS CLASSIFY

A FOUR LEVEL DENSITY SCALE:



ALMOST ENTIRELY
FATTY

SCATTERED AREAS OF
FIBROGLANDULAR DENSITY

HETEROGENEOUSLY DENSE

EXTREMELY DENSE

Breast Pain

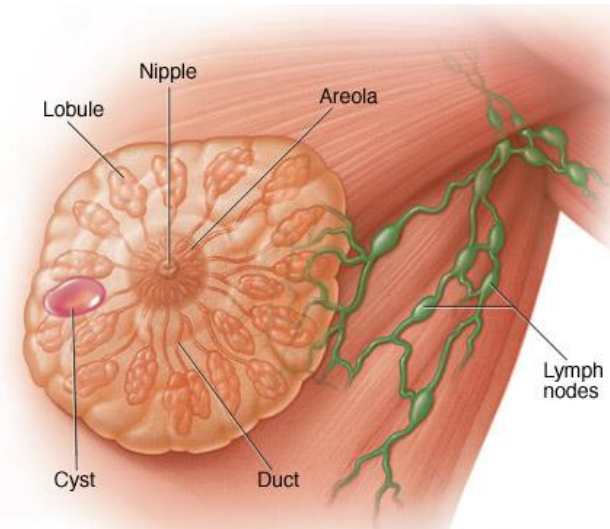
- ✓ Causes
 - ✓ Menstrual cycle
 - ✓ Fibrocystic breast
 - ✓ Medications
 - ✓ SSRI, Haldol, digoxin, spironolactone, methyldopa
 - ✓ Caffeine
 - ✓ Smoking
 - ✓ Improperly fitted bra

- ✓ Treatment
 - ✓ Avoid caffeine
 - ✓ Avoid smoking
 - ✓ Decrease sodium intake
 - ✓ Low fat diet
 - ✓ OTC vitamin E and evening primrose oil
 - ✓ Bra fitting
 - ✓ Diclofenac gel/cream for surface sensitivity

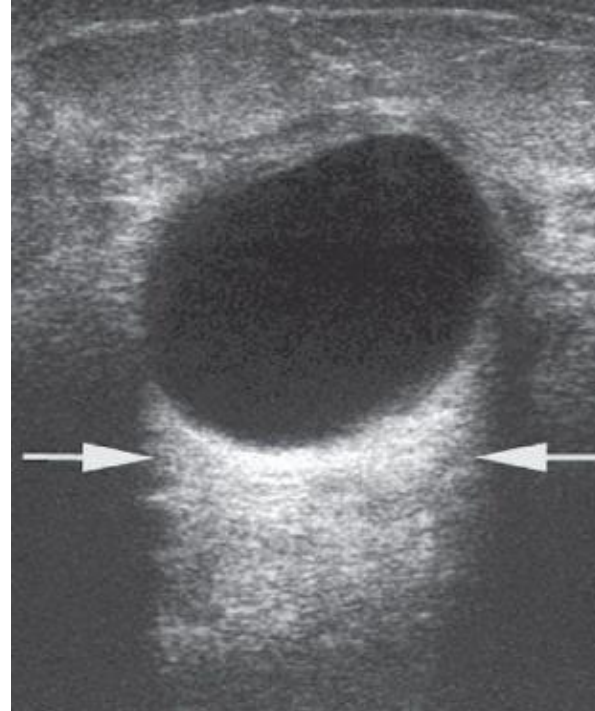
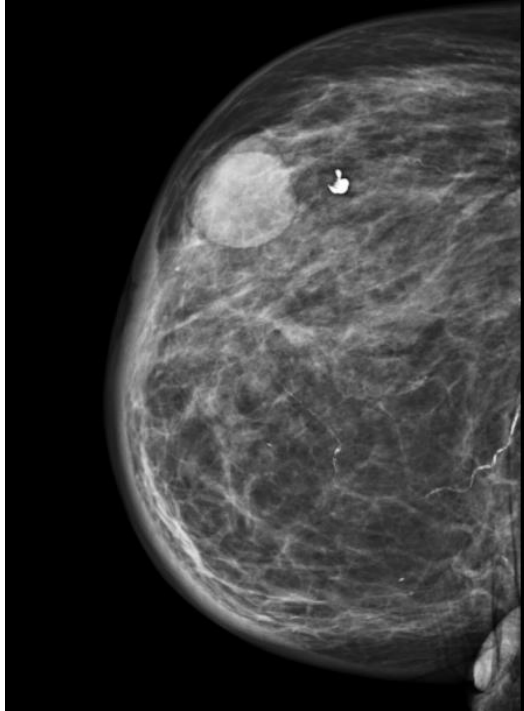
- ✓ One study in 1996 showed RR of 2.7 for breast cancer in patients with complaints of cyclic swelling and mastalgia
- ✓ Topical tamoxifen in clinical trials have shown to more efficacious than oral treatment arm in treating cyclical breast pain with low blood drug level indicating less risk of side effects.

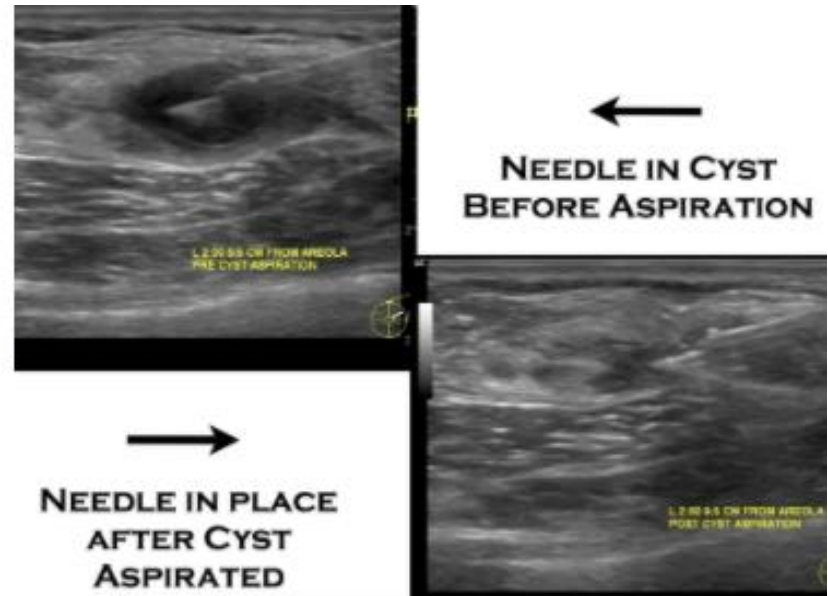
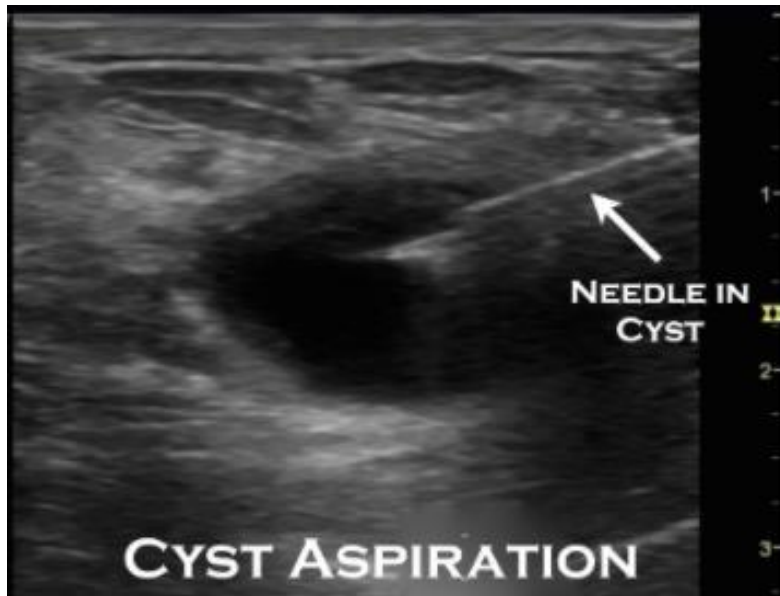
Simple Cyst

- ✓ Generally small, sac filled with fluid
 - ✓ Can grow large and cause discomfort
- ✓ Considered BIRADS-2
- ✓ May grow and shrink based on menstrual cycle
- ✓ Can cause breast asymmetry due to size
- ✓ Treatment
 - ✓ Generally none, unless painful
 - ✓ Aspiration first line treatment
 - ✓ If recurs, may choose to get another aspiration vs excision



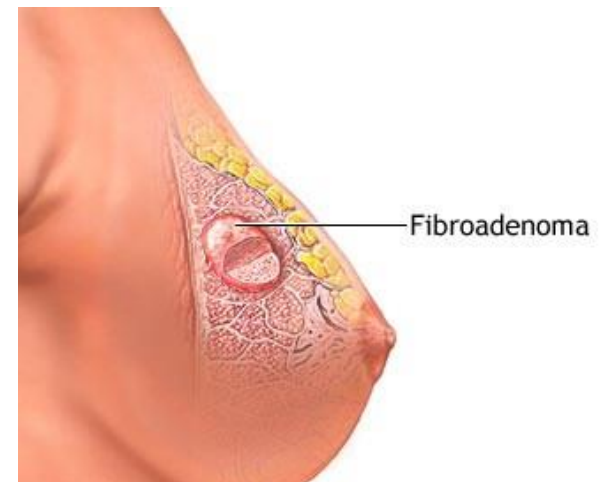
Simple Cyst



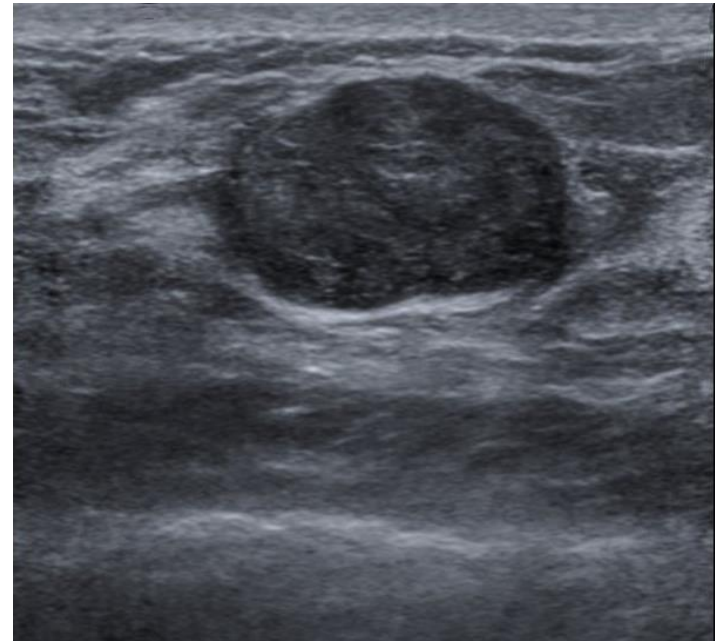
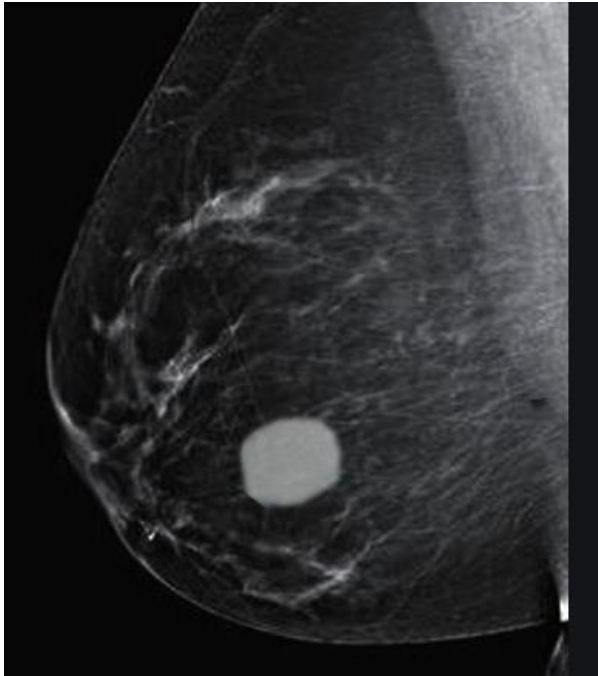


Fibroadenoma

- ✓ Most common solid lump common in young women between ages 15-35
- ✓ Smooth, rubbery, mobile, well defined
- ✓ Usually painless
- ✓ Treatment
 - ✓ Monitoring for change in size
 - ✓ Biopsy to confirm diagnosis if >2cm or growing rapidly (Could be phyllodes tumor)



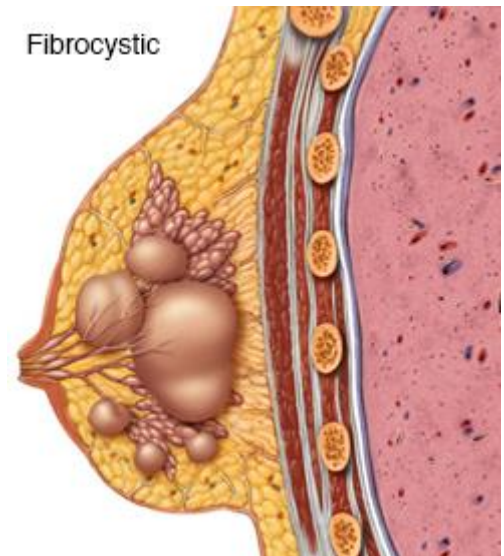
- ✓ Types
 - ✓ Complex – based on pathology result. Mix of more than one type
 - ✓ Juvenile – in ages 10-18, may grow large, but most shrink and disappear over time
 - ✓ Giant – larger than 5 cm
 - ✓ Phyllodes – may be malignant or benign. Recommended to be removed



- ✓ Management
 - ✓ Observe with short-term ultrasound to demonstrate stability
 - ✓ Core needle biopsy if larger than 2cm
 - ✓ Excise if rapid growth, >0.5cm in 6 months
 - ✓ Generally not advised to remove any benign lesions in developing breast as it has high risk of permanent breast deformity

Fibrocystic Breast

- ✓ Dense and irregular breast tissue
- ✓ Very important for patients to perform self breast exam to know what's normal
- ✓ Generally harder to read Mammograms and require ultrasound



Nipple Discharge

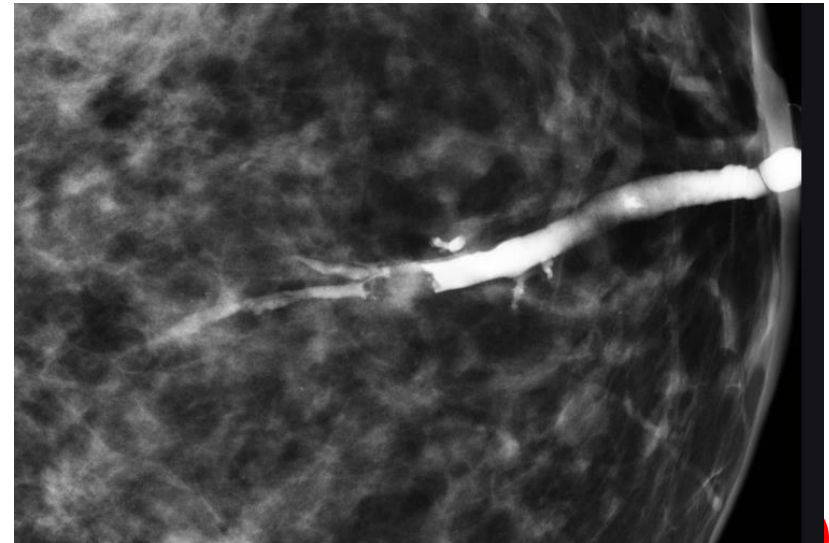
- ✓ Could be spontaneous or non-spontaneous
- ✓ Bilateral or Unilateral
 - ✓ Bilateral generally due to systemic causes (medications, hormone imbalance etc.)
- ✓ Yellow, green, brown, thick and non-spontaneous
 - ✓ Physiologic and needs no treatment
- ✓ Clear, Bloody and spontaneous
 - ✓ Needs workup to rule out malignancy

- ✓ Causes
 - ✓ Cancer
 - ✓ Breast stimulation
 - ✓ Fibrocystic disease
 - ✓ Intraductal papilloma
 - ✓ Blocked duct
 - ✓ Medications

- ✓ Work up includes mammogram, ultrasound \pm MRI

- ✓ Ductograms are painful and generally been abandoned

- ✓ Duct excision can be offered for symptomatic relief



Mastitis and Breast Abscess

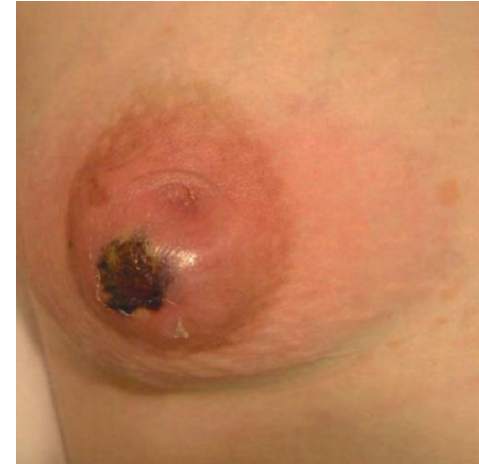
- ✓ Affects women between ages of 18-50
- ✓ Need to rule out inflammatory cancer
- ✓ Lactational or non-lactational

- ✓ Lactational
 - ✓ Usually caused by Staph Aureus, staph epidermidis or streptococcus
 - ✓ Starts as a cracked nipple and bacteria infects poorly drained segments of the breast
 - ✓ Common during first 6 weeks or weaning period
 - ✓ Presents as erythema, swelling, tenderness
 - ✓ Amoxicillin-clavulanate or erythromycin
 - ✓ Breast-feeding should continue to promote drainage of the engorged segment
 - ✓ Infant is not harmed by the milk or antibiotics

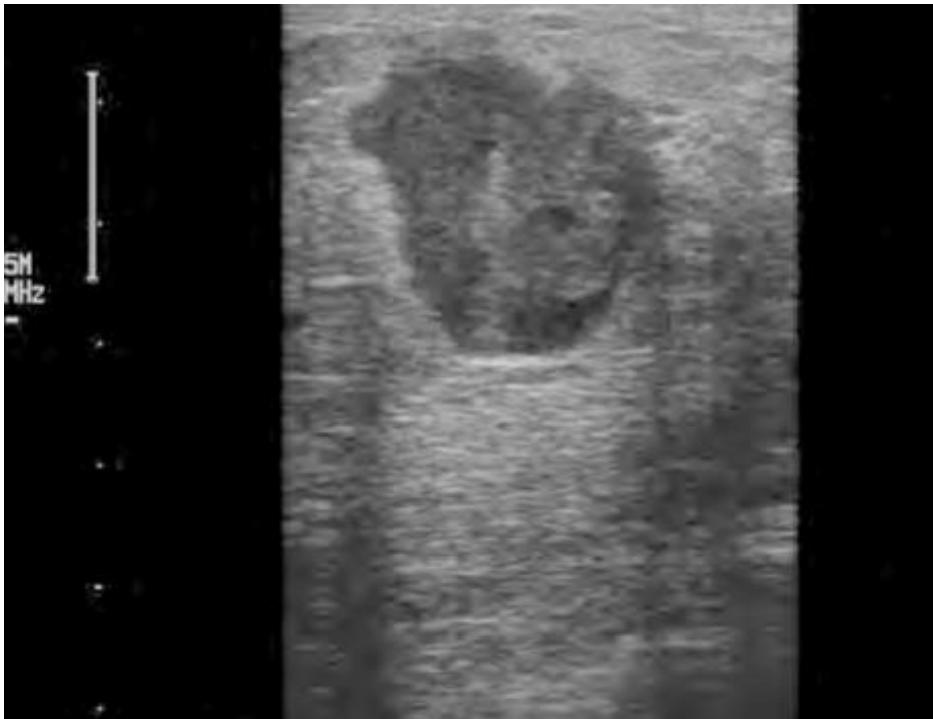


Mastitis and Breast Abscess

- ✓ Non-lactational
 - ✓ Peri-areolar
 - ✓ Most common
 - ✓ Direct correlation to smoking
 - ✓ Chronic periductal mastitis
 - ✓ Experience recurrent episodes
 - ✓ Aerobic and an-aerobic bacteria
 - ✓ Treated with amoxicillin-clavulanic acid or flagyl+erythromycin
 - ✓ May need removal of all affected ducts for long term treatment
 - ✓ Need Mammogram performed after resolution to rule out cancer
 - ✓ Peripheral
 - ✓ Less common
 - ✓ Associated with underlying diabetes, RA, steroid use and trauma
 - ✓ Aerobic or an-aerobic



- ✓ Abscess
 - ✓ Readily visible on ultrasound
 - ✓ Ultrasound-guided aspiration preferred over open incision and drainage
 - ✓ Serial drainage and oral antibiotic course is usually effective at resolving abscess and is current treatment of choice



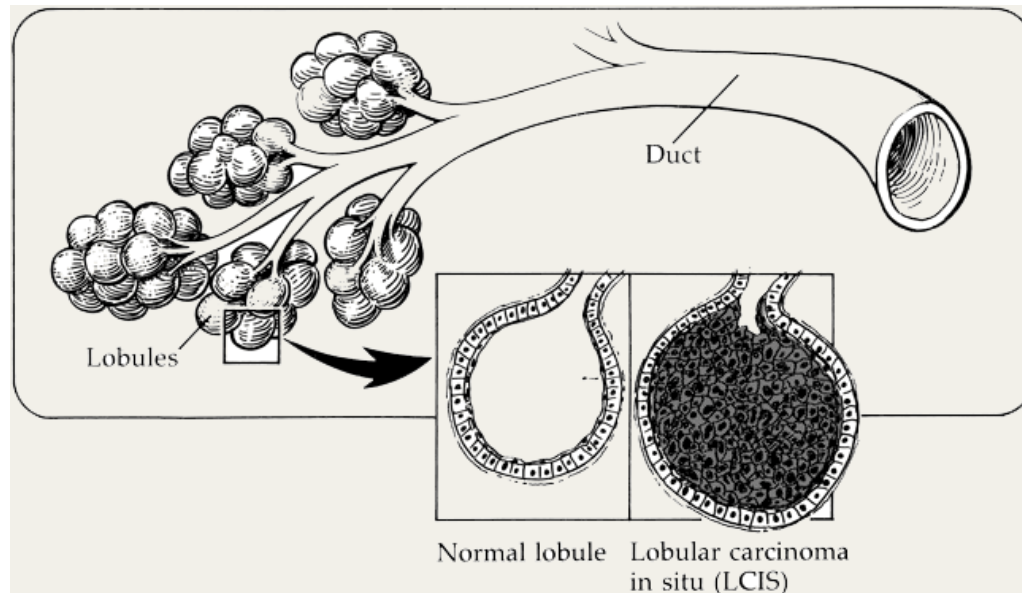
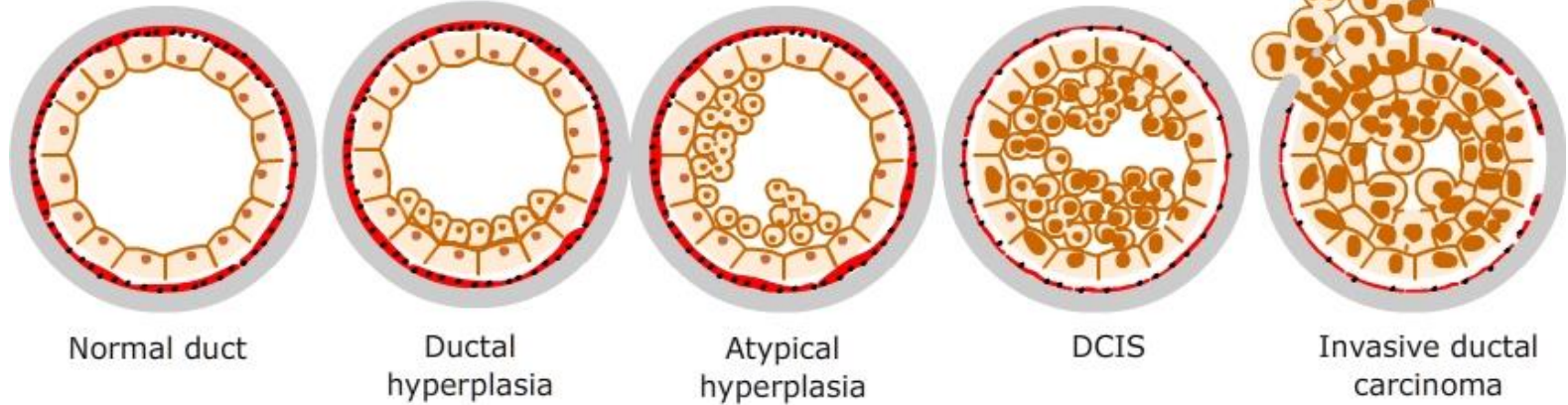
High Risk Lesions

- ✓ Associated with increase in future risk of cancer
- ✓ Up to 20% risk of adjacent cancer
- ✓ Generally requires active surveillance or excision
- ✓ May require other risk reduction strategies like estrogen blocking agent

High Risk Lesions

- ✓ Atypical Ductal Hyperplasia (ADH)
- ✓ Atypical Lobular Hyperplasia (ALH)
- ✓ Lobular Carcinoma In-Situ (LCIS)

High Risk Lesions



- ✓ Other common lesions noted on core biopsies (without atypia)
 - ✓ Radial scar – 1% upgrade rate
 - ✓ Intraductal papilloma – 1.6% upgrade rate
 - ✓ Flat epithelial atypia – 1.6% upgrade rate

- ✓ Do not need to be routinely removed

Hormone replacement therapy

- ✓ Estrogen-Progesterone and Progesterone alone increases risk of breast cancer
- ✓ Estrogen alone has shown inconsistent results but are favorable
- ✓ Replacement after oophorectomy in premenopausal women is safe until age of 50 given no other risk factors are present
- ✓ Short term (a few months) use after menopause with clear plan to wean off

Hormone replacement therapy

- ✓ For women taking 5 years of HRT after menopause around age 50
 - ✓ Progesterone alone – 1 cancer for every 50 users
 - ✓ Estrogen and progesterone – 1 cancer for every 70 users
 - ✓ Estrogen alone – 1 cancer for every 200 users

Screening Guidelines

- ✓ Women between 40 and 44
 - ✓ have the option to start screening with a mammogram every year.
- ✓ Women 45 to 54
 - ✓ should get mammograms every year.
- ✓ Women 55 and older
 - ✓ can switch to a mammogram every other year, or they can choose to continue yearly mammograms.
- ✓ Screening should continue as long as a woman is in good health and is expected to live 5-10 years or longer.
- ✓ Annual screening mammograms has the benefit of reducing breast-cancer associated mortality by 40% in average risk women.

High risk patients

- ✓ Have a lifetime risk of breast cancer of about 20% to 25% or greater, according to risk assessment tools that are based mainly on family history
- ✓ Have a known *BRCA1* or *BRCA2* gene mutation (based on having had genetic testing)
- ✓ Have a first-degree relative (parent, brother, sister, or child) with a *BRCA1* or *BRCA2* gene mutation, and have not had genetic testing themselves
- ✓ Have Li-Fraumeni syndrome, Cowden syndrome, or Bannayan-Riley-Ruvalcaba syndrome, or have first-degree relatives with one of these syndrome
- ✓ Had radiation therapy to the chest when they were between the ages of 10 and 30 years

- ✓ Should undergo annual enhanced screening protocol
 - ✓ Mammogram and MRI
 - ✓ 2 clinical breast exams annually
 - ✓ Prophylactic risk-reducing mastectomy only offered to patients with BRCA mutation
 - ✓ Only patients with prognostic benefit at this time

COVID and Breast care

- ✓ Screening and surveillance studies were delayed secondary to COVID pandemic
 - ✓ Biopsies were delayed in patients despite suspicious lesions
 - ✓ Done to preserve medical resources including PPE, medications and avoid spread of the disease to medical personnel
- ✓ Lead to delay in cancer diagnosis and treatment
 - ✓ Long term effects still to be seen

American Society of Breast Surgeon's recommendations April 2020

- ✓ Priority categories created
 - ✓ A
 - ✓ Any delay would significantly alter prognosis
 - ✓ Breast abscess, expanding hematoma with HD instability
 - ✓ B
 - ✓ Some delay will not alter prognosis, but longer delay would impact outcome
 - ✓ Most common category for breast cancer patient
 - ✓ Patients were offered NAC for Her2+ or TNBC, locally advanced BC
 - ✓ C
 - ✓ Elective reconstruction
 - ✓ DCIS
 - ✓ Benign disease
 - ✓ Prophylactic mastectomy
 - ✓ T1N0 ER+ Her2- disease offered neo-adjuvant hormonal blockade



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Thank You.

Questions



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