Fibroadenoma





RISHACADEMY educate yourself to empower yourself

Introduction

- Fibroadenoma are the most common benign breast tumor.
- Those are common in young women (age 15-25 yrs) and derived from the lobules of the breast.
- Aberration in normal development of a lobule
- Most of them stop growing after teaching 2-3 cms.



Etiology

- Causes for fibroadenoma are debatable.
- It can be related to the hormonal changes in the body and response to the oestrogen in breast tissue.
- They will increase in size when increasing the oestrogen level in the body.
- Therefore their size may increase during the pregnancy, in late menstrual cycle.



- Involute in post menopausal women and form coarse calcifications. Therefore those are uncommon in post menopausal women.
- Above changes support the hormonal etiologic theory.
- Females who are take hormonal oral contraceptives has high risk of getting fibroadenoma.



- Fibroadenoma is a type of adenomatous breast lesion. It has epithelium and has minimal malignant potential. If patients has multiple fibroadenomas they have family history of these tumors.
- They can be associated with the cyclosporine use and Cowden syndrome as well
- Fibroadenoma can be located anywhere
 in the breast

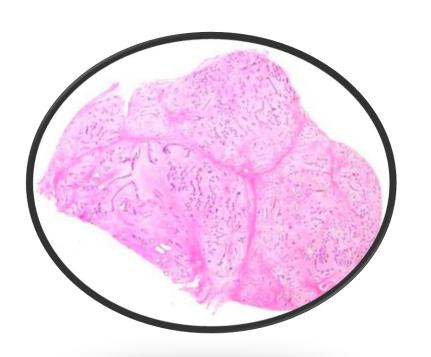
Macroscopy and microscopy

- There are compressed glandular structures in a proliferating myxochondroid stroma.
- Outer surface is smooth and surrounded by a well marked capsule.
- Those are sharply demarcated from surrounding stroma.
- Cut surface shows gray white bulge





Microscopy and Macroscopy







Clinical features

- Fibroadenomas are firm and rubbery in consistency and painless.
- As they are mobile known as the breast mouse.
- It can be examined with the flat of the hand in circular motion.
- Those are frequently multiple and bilateral.
- Occasionally seen in combination with lobular carcinoma and has very low risk for malignancy. (0.01%risk for lobular carcinoma)



Differential Diagnosis

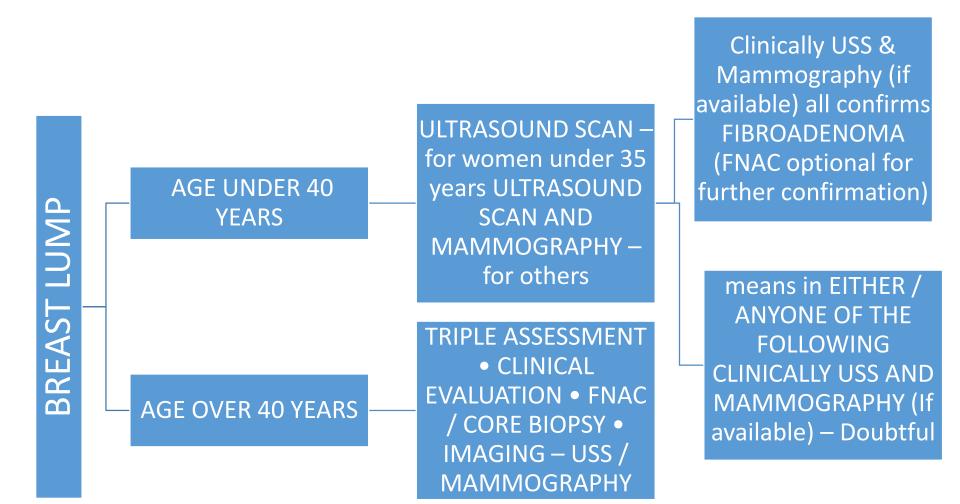
- Fibroadenoma can be confused with,
- 1.Breast cysts
- 2.Breast carcinoma
- 3. Metastasis to the breast from another primary site
- 4.Phyllodes tumor



Investigations

- Proceed with the triple assessment.
- 1.Clinical assessment with history and examination
- 2.Radiological assessment with USS, mammogram is not done routinely.
- 3. Pathological assessment with FNAC









Management

- In lesions <3 cm biopsy may be avoided if all features are consistently benign on triple assessment. (In older patients)
- Excision should be considered for:
- 1. Age >40 years
- 2. Lesions >3 cm
- 3. Rapidly enlarging lesions
- 4. Patient reassurance/preference



- Reassurance can be done if,
- 1.<25 years and
- 2.Size < 4 cm
- There are 2 surgical procedures used to remove a fibroadenoma
- 1. Lumpectomy or excisional biopsy
- 2. Cryoablation



Reassure the patient. review in six months. Unless Clinically USS & patient wishes removal Mammography (if available) all confirms rapidly enlarging FIBROADENOMA (FNAC more than 3cm in optional for further diameter confirmation) • associated pain Reassess in six months INDETERMINATE means in EITHER / ANYONE OF **BENIGN** THE FOLLOWING **CLINICALLY USS AND** MAMMOGRAPHY (If ATYPICAL EXCISE. Send available) - Doubtful for HISTOPATHOLOGY Do FNAC



Types of fibroadenomas

- Simple fibroadenoma- look same all over when you see them in a microscope
- 2. Complex fibroadenoma- they are bigger and tend to affect older women
- 3. Juvenile fiboadenoma
- 4. Giant fibroadenoma



Giant Fibroadenoma

- They are occasionally occur during puberty. They can be seen in age of 15-18 years and 45 -53 years.
- They are over 5 cm in diameter and are often rapidly growing. Can grow to the size of 15 cm.



- Giant fibroadenomas are similar to smaller fibroadenomas and can be enucleated through a submammary incision.
- Those are more common in the Afro-Caribbean population.
- Therefore the treatment is enucleation.



Juvenile Fibroadenoma

- Seen in adolescents
- They are rapidly growing tumors and cause distortion of the breast
- There is marked stromal cellularity and epithelial hyperplasia and has occasional mitotic figures





Complications and Prognosis

- They have very low risk of malignancy –
 0.01% (lobular carcinoma)
- The risk for malignancy increase if have complex fibroadenoma and this type of lesion may contain calcified breast tissue.
- They have good prognosis because it is a benign mass which shrinks in size over ime in the majority of cases.