Breast Problems in General Practice

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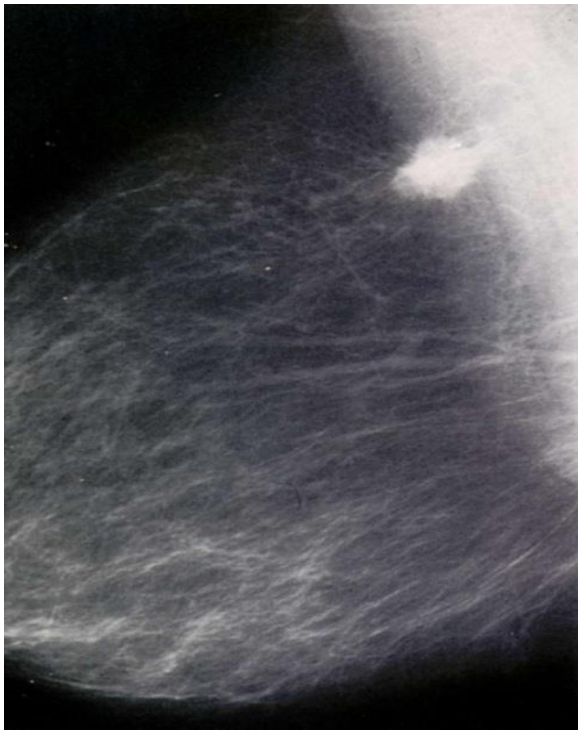
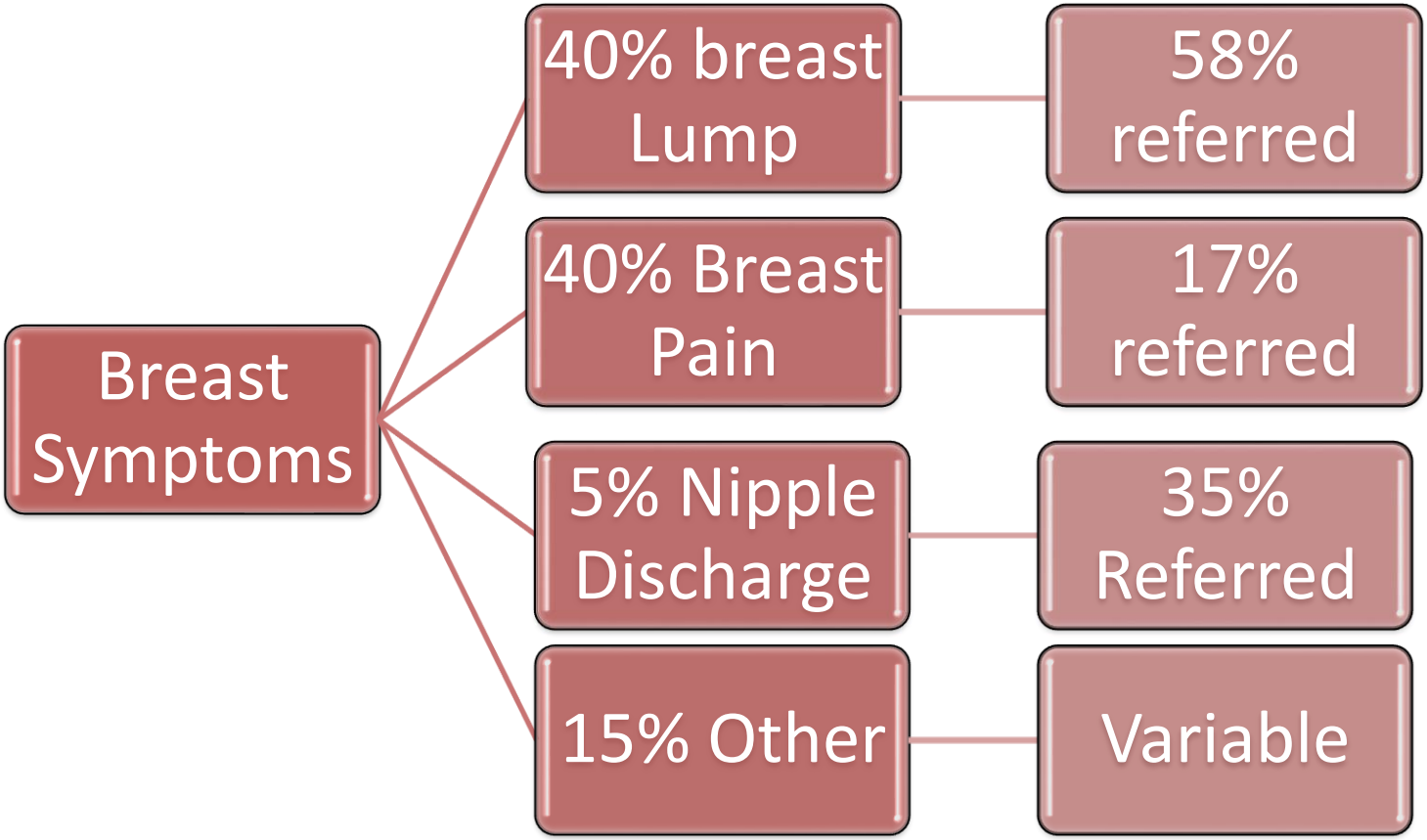
Secondary Care

- 4000 secondary clinic referrals per year for a 500,000 population catchment.
- Generates 200 cancers per year of which 1/3rd are screening derived
- 9 out of 10 breast clinic appointments are for non-malignant disease.



Primary Care

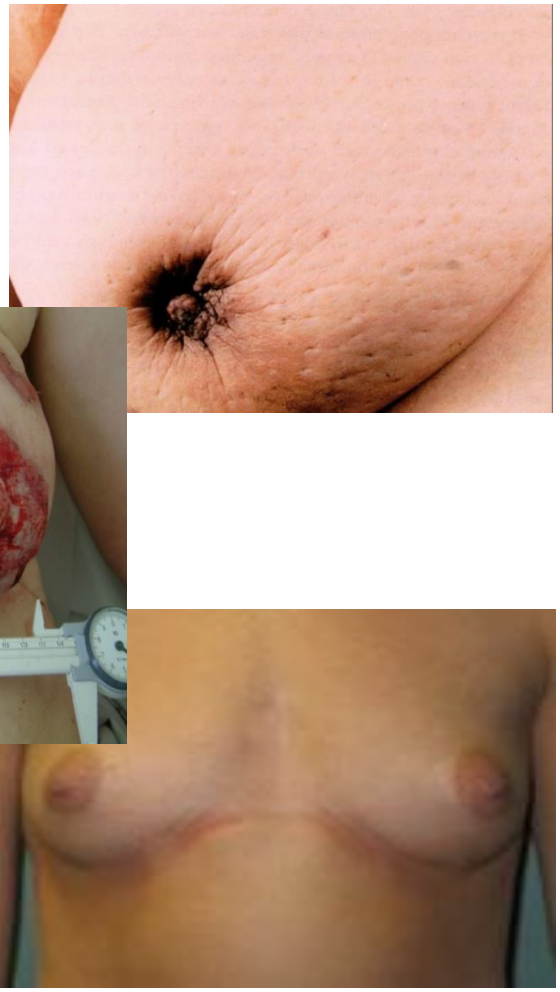
- Average of 2 breast consultations per month



Newton et al, 1999, Edwards et al, 1999

Breast Lumps

- 10 to 1 benign to malignant ratio seen in breast clinic.
- Probably 20:1 in primary care
- How to filter?



Case Study: Breast Lump

32 year old female complains of a tender lump in her right breast for 3 weeks.

Very anxious as older sister had breast cancer when she was 32

On examination, right breast is slightly more nodular than the left but no discrete lump is felt.

She is mid cycle.

What would you do?

Case Study

Wait for 2 weeks until period passed and re-examine?

Refer immediately in view of anxiety and family history?

Case Study

- Referral to breast clinic
- Ultrasound showed a 2 cm discrete smooth mass, U2, in an area of benign breast change
- Biopsy: B1, normal breast tissue
- What would you do?

Case Study

Non concordant. Should have lesional tissue, B2 at least, in biopsy. Suggests is a missed biopsy.

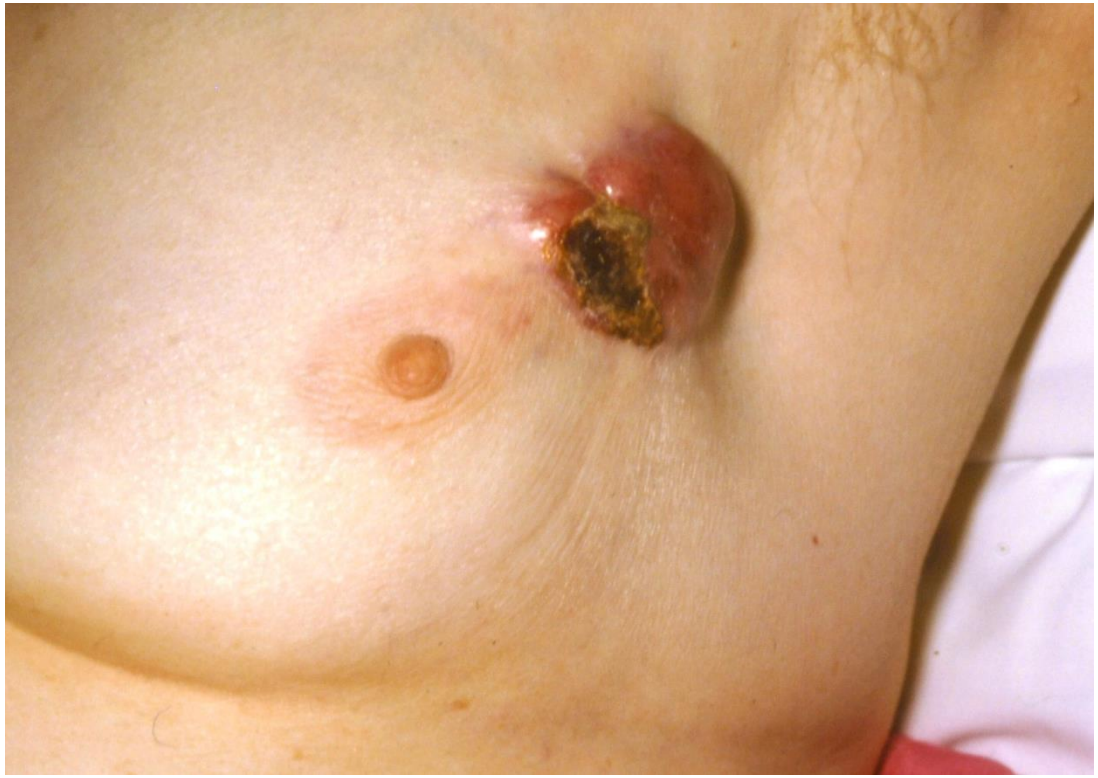
Re-biopsy indicated.

Fibroadenoma, B2.

Case Study

- What now?
- Reassure and discharge?
- Refer to familial breast cancer service?
- Offer excision of lump?

Characteristics of a Malignant Lump



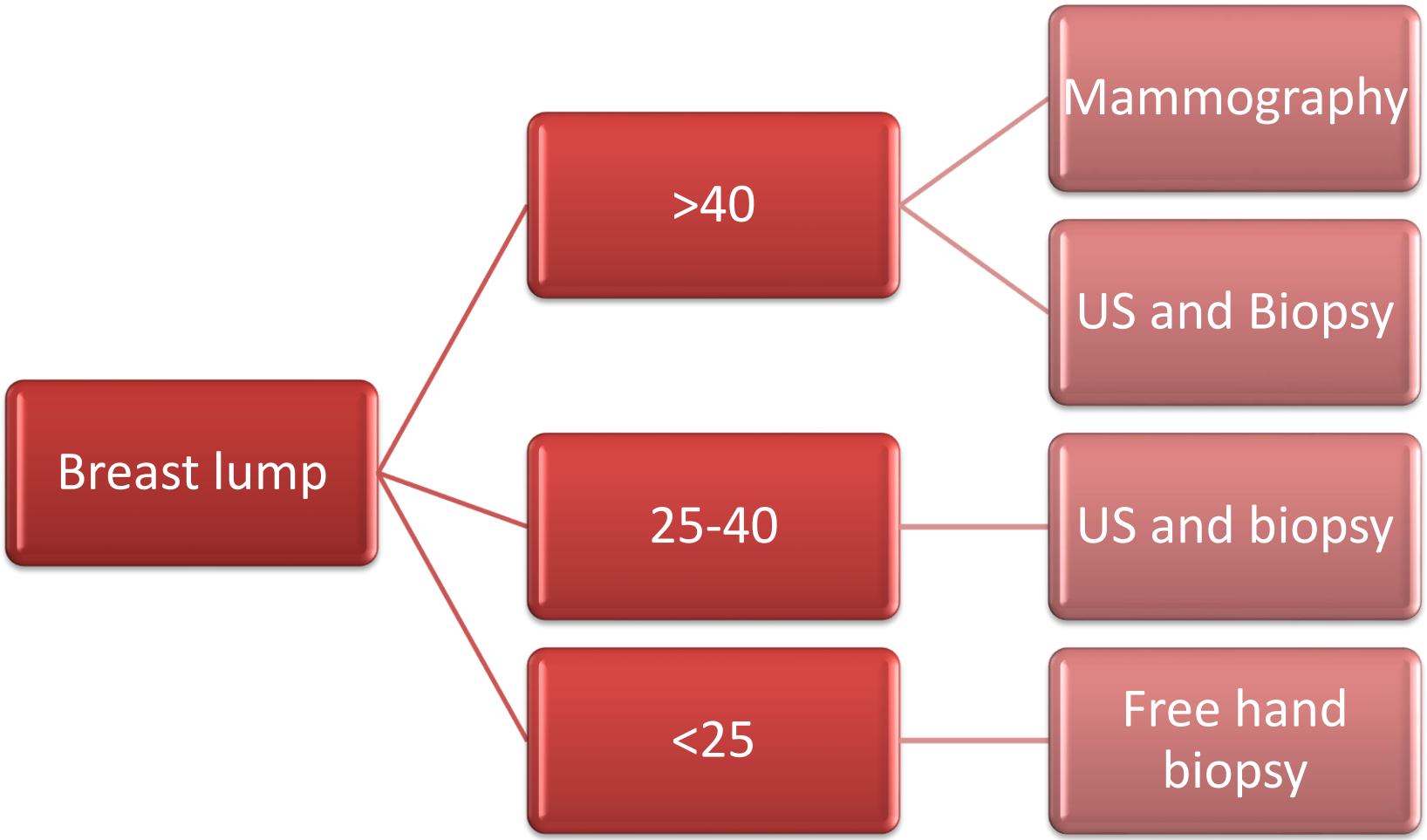
Characteristics of a Malignant Lump

Hard	• Lobular cancer/DCIS may be a diffuse thickening
Irregular margin	• High grade cancer may have a pushing edge and feel and look on imaging like a fibroadenoma
Skin tethering/fixation	• Pathognomic if present but rarely seen
Nodal swelling	• Pathognomic if present but only 1 in 10
Older Age	• Youngest cancer I have seen was aged 18

Aetiology of breast lumps

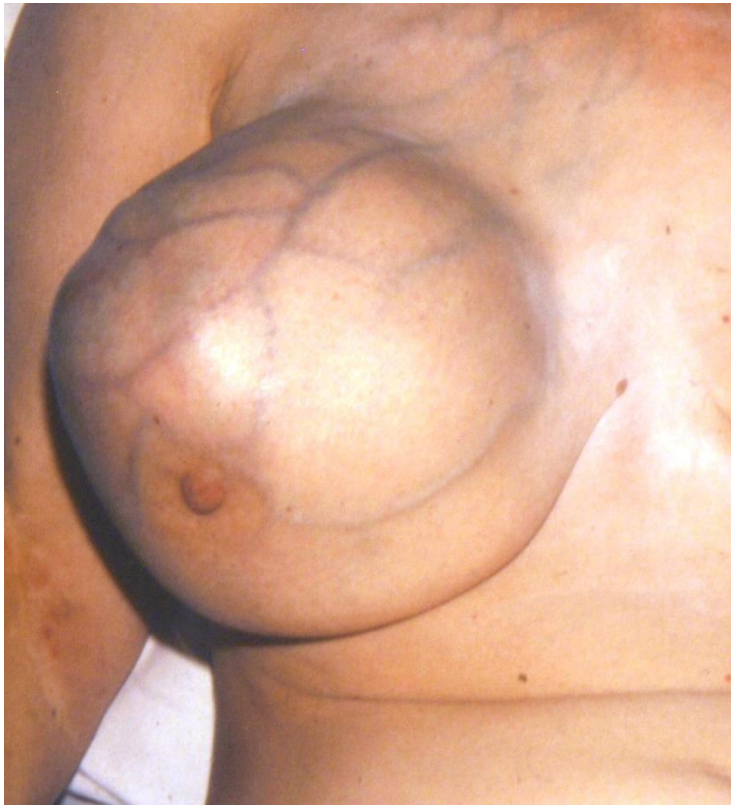
- Benign breast change
- Fibroadenoma
- Cyst
- Sebaceous cyst
- Papilloma
- Fat necrosis/haematoma
- Mastitis/abscess
- Cancer
- Sarcoma, lymphoma, metastases
- Implant related: (capsule, rupture, edge or crease)

Management


Breast lump
>40
25-40
<25
Mammography
US and Biopsy
US and biopsy
Free hand biopsy

Breast lumps: Fibroadenoma

- Age range: predominantly puberty to 25- 30
- Characteristics: smooth, mobile (breast mouse), non tender.
- Size: usually 1-3 cm.
- Giant variants and multiple juvenile FA
- Phyllodes tumour!
- Management: leave unless increasing in size, atypical histology, tender.



Cysts

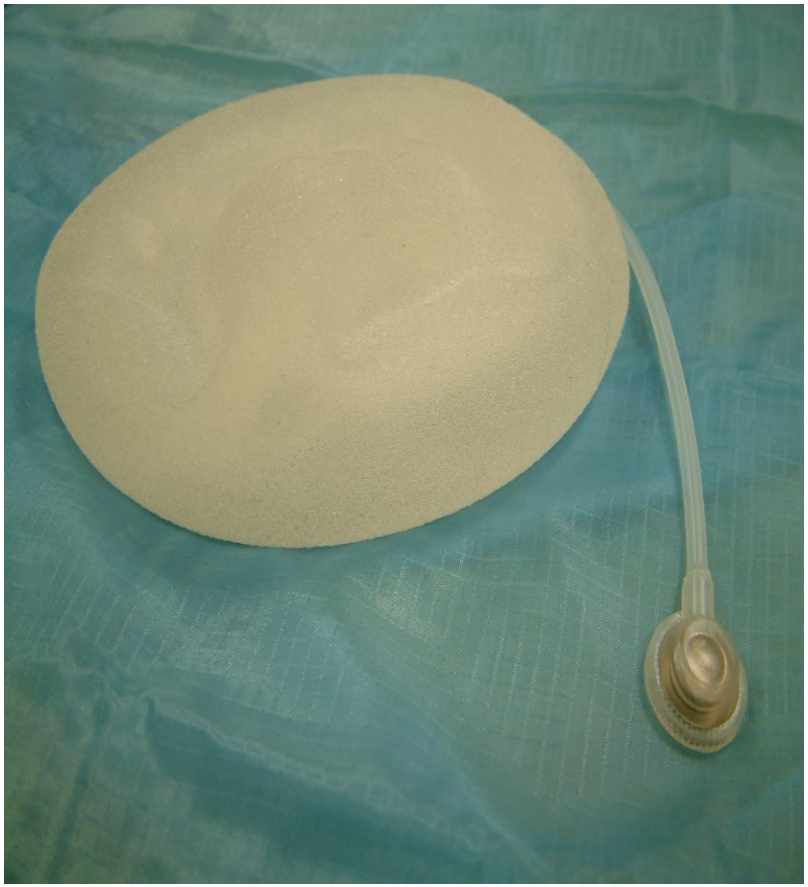
- Involutional change, Age Range: 35-55
- Size varies from 1mm to 20 cm but on average, symptomatic ones are 1-2 cm and often multiple
- Characteristics: may feel cystic but if tense may be hard and irregular and difficult to tell from cancer
- Management: Aspirate symptomatic cysts. Will cease at menopause unless on HRT

Benign Breast Change

- Sometimes known as fibrocystic change.
- Age range, puberty to menopause but usually younger end of range.
- Often tender/painful
- Cyclical variation
- Feels like rubbery nodularity
- Management: reassure

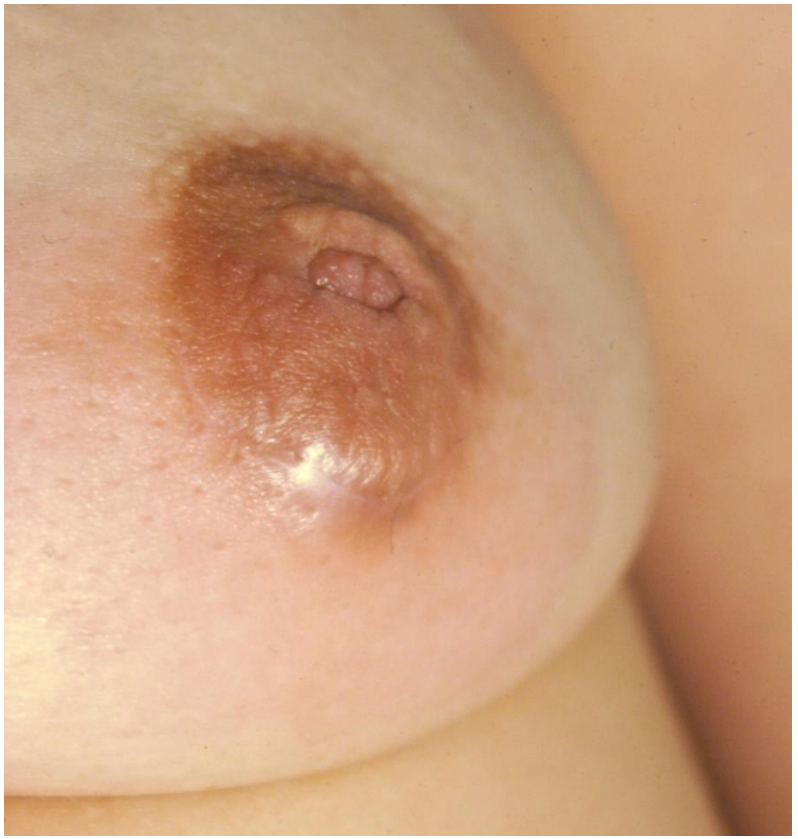
Implant problems

- PIP implants!
- Capsule formation: affects 5%
- Rupture: incidence relates to duration of implantation
- Migration
- Changes in body habitus and ptosis



Breast Sepsis: Mastitis

- Red, tender, swollen, painful area. May have associated pyrexia and ‘flu-like symptoms
- May be lactational or non lactational
- Usually respond to antibiotics within 48 hours
- May progress to abscess formation



Breast Sepsis

Acute Peripheral or Lactational sepsis.

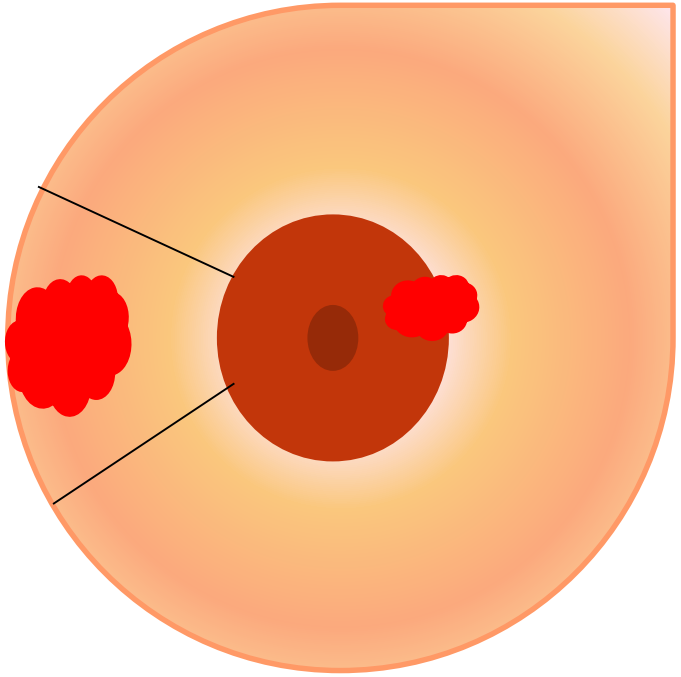
•**Age**: < 40 years

•**Organism**: Staph Aureus

•**Cause:** pregnancy & lactational blocked duct, diabetes.

•**Treatment:** serial aspiration. Avoid drainage surgically as may cause lactational fistula

•**Antibiotics:** Flucloxacillin



Acute Peri-areolar sepsis.

•**Age**: < 50 years

•**Organism**: Staph Aureus, Strep, Bacteroides. Enterococci

•**Cause:** Duct ectasia & periductal mastitis. Smoking

•**Treatment:** serial aspiration. Surgical drainage, Total Duct excision, fistulectomy

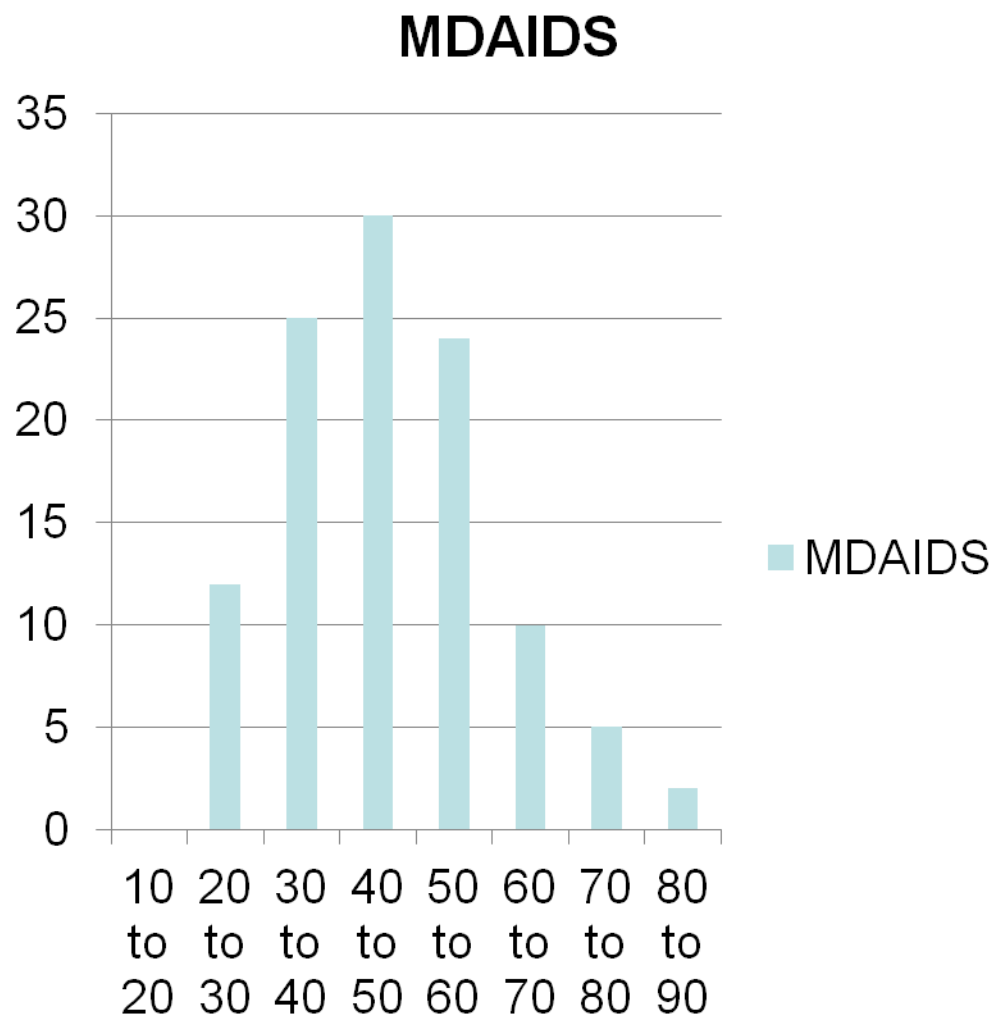
•**Antibiotics:** Co Amoxiclav

Lactational

- May be associated with a cracked nipple or just spontaneous due to a blocked lactiferous duct
- Serial aspiration and antibiotics
- Continue to feed (unless antibiotics contra-indicate) or use a breast pump
- Avoid incision and drainage as very high risk of lactational fistula
- May need to stop breast feeding if I and D is necessary

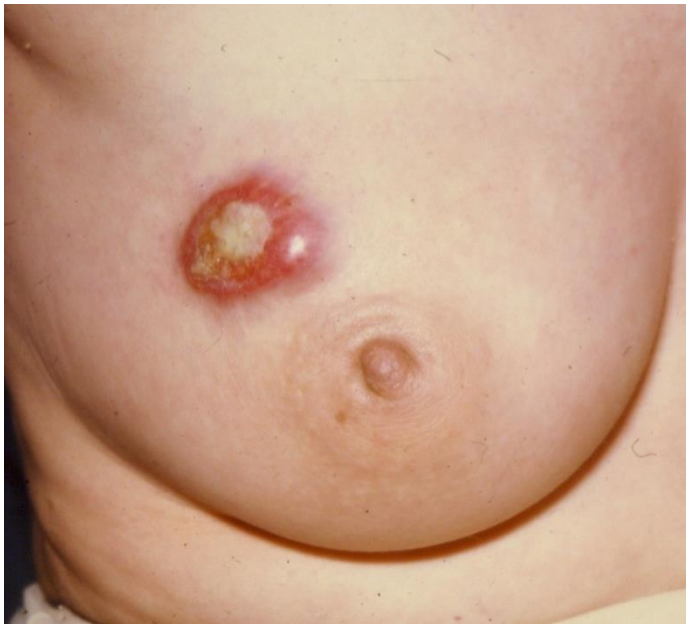
Non lactational

- Usual cause is duct ectasia and periductal mastitis disease sequence
- Link to smoking

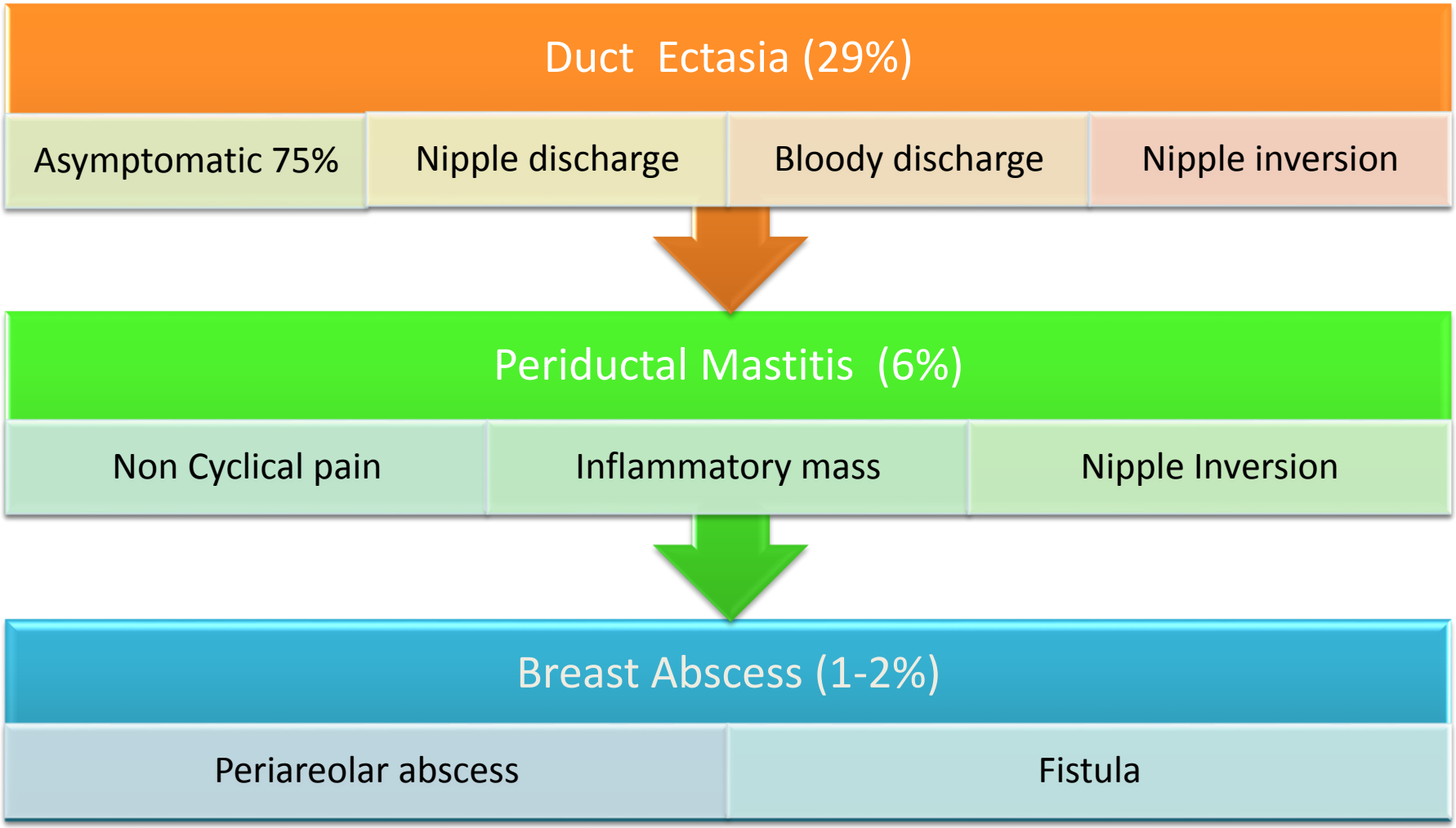


Indications for surgery for an abscess

- Failure of repeated aspiration and antibiotics
- Large multiloculated collection
- Overlying skin necrosis
- Patient intolerance of aspiration
- Unable to aspirate (pus too viscid)

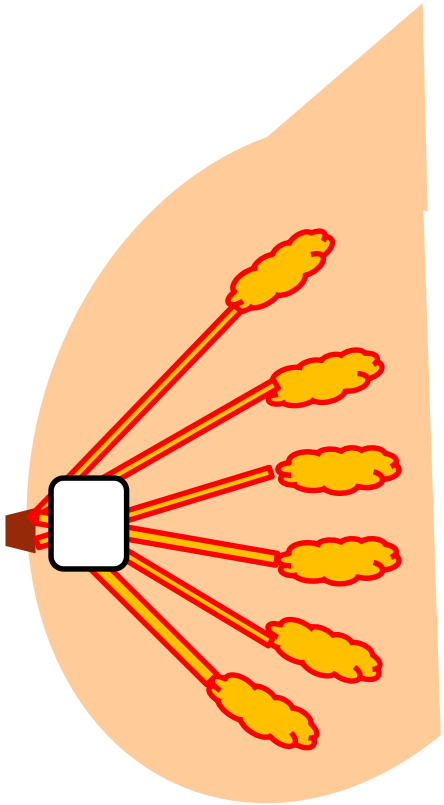


Duct Ectasia & Periductal Mastitis



Chronic Periductal Mastitis

- Total Duct Excision
- Use either a radial or peri-areoalar incision to resect all the sub-areolar ducts.
- Risk: nipple numbness, nipple necrosis, recurrent sepsis



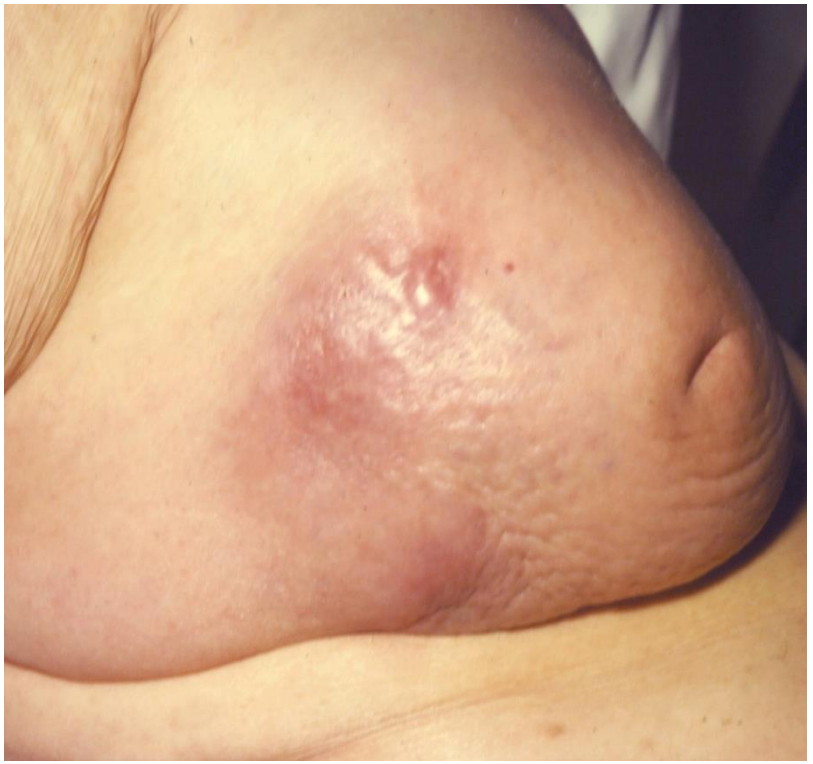
Fistulation

- Will not heal spontaneously
- Recurrent bouts of sepsis/abscess formation
- Progressive scarring

- Fistulectomy and Total Duct Excision

Traps for the un-wary: Inflammatory Breast cancer

- Important differential
- May look very similarly: breast red, oedematous, swollen, axillary lymphadenopathy, mass or thickening
- If fails to settle with 1-2 weeks of antibiotics, always refer for imaging and biopsy.



Rarities: TB

- Uncommon
- Often non-UK
- May have evidence of TB elsewhere
- Often more chronic course, fistulation, may be extensive involvement
- Usually end up having surgical debridement and pus and biopsies sent off for TB

Rarities: Granulomatous mastitis

- ? Aetiology
- Florid mastitis
- May be multifocal
- Antibiotics usually fail to settle
- Usually end up having surgery
- Histological diagnosis
- May respond to steroids

Nipple Discharge: Case Study

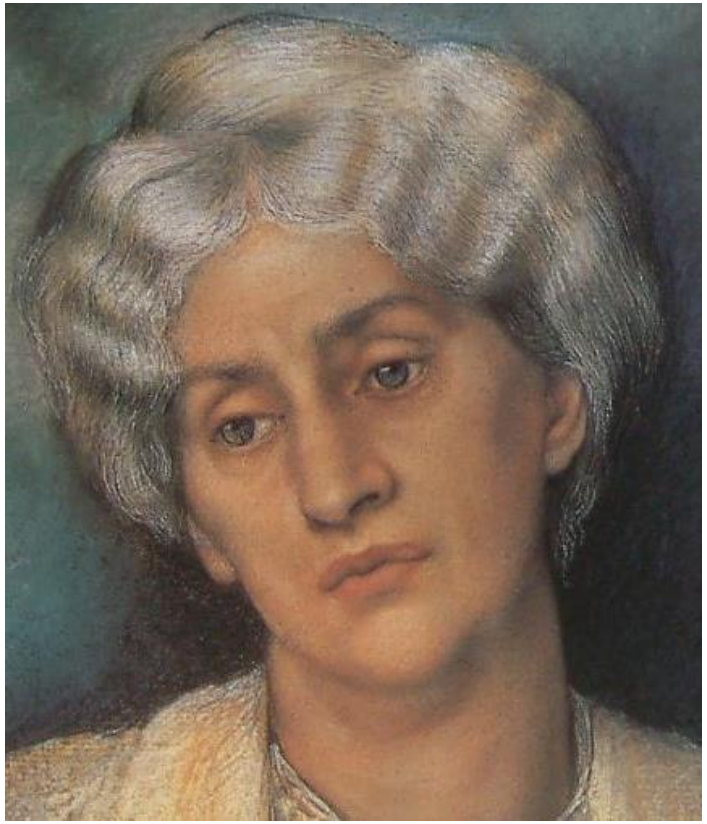
Margaret Latham, 61 years of age

4 month history of unilateral, spontaneous brown-red nipple discharge.

No lumps or other breast symptoms.

Feels embarrassed in case it stains through her clothes when she goes to the swimming baths with her grandchildren

Examination: normal breast and axillary examination. Tiny bleb of brown discharge on squeezing the left nipple.



Case study

- What would you do now?
- Mammography, ultrasound.
- Both normal.
- Offer surgical microdochectomy: patient not keen as discharge is not bothering her and she doesn’t want an operation ‘at her age’.
- Watchful waiting: see in 3 months

Case study

- Discharge persists. Examination minimal thickening in lateral breast not noted before.
- Core biopsy: B4: Suspicious of malignancy
- Diagnostic excision plus microdochectomy
- 5 cm of high grade DCIS, tracking towards nipple
- Offer mastectomy

Nipple Discharge

Physiological	Hormonal	Duct Ectasia	Papilloma	DCIS
Non spontaneous, bilateral, yellow or creamy	Milky, multiduct, large volume. Rarely bloody in epithelial hyperplasia of pregnancy	Greenish brown, multiduct	Clear or bloody, uniduct	Clear or bloody, uniduct
Reassure	Pregnancy test, serum hormone profile, if bloody, monitor	Reassure or Total Duct Excision if volume excessive	Imaging & proceed to microdochectomy	Imaging and proceed to microdochectomy

Blood stained

- Majority due to duct ectasia, then papillomas then DCIS. Rarely bilateral in pregnancy due to epithelial hyperplasia (papillary like overgrowth of the duct epithelium)

- All require imaging. Cytology of nipple aspirates is unhelpful

- If imaging unhelpful, microdochectomy is required

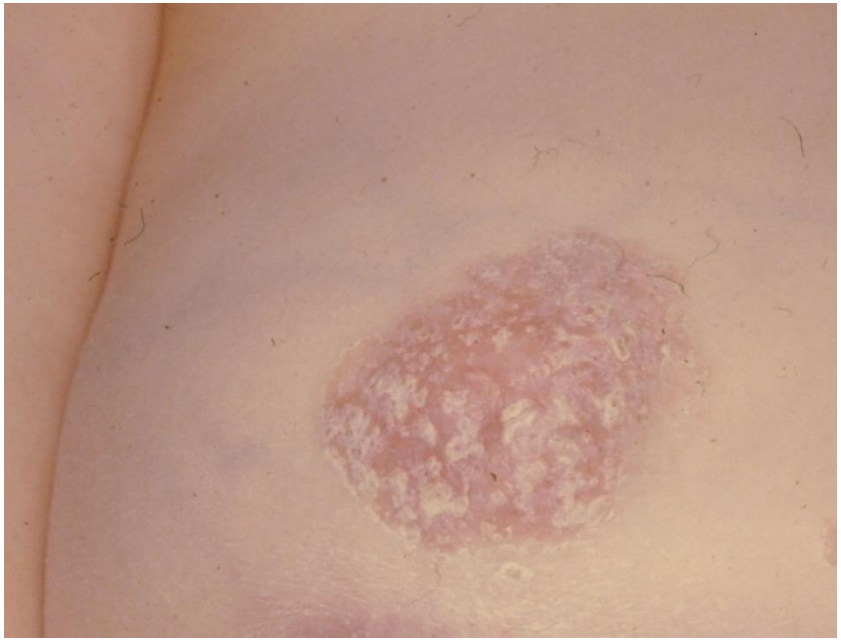
Single duct/spontaneous, non-bloody

- Most commonly duct ectasia or papilloma

- Again imaging is required. If unhelpful, proceed to microdochectomy

DCIS

- Imaging is often positive and gives the diagnosis.
- If not, microdochectomy
- Paget's



Papilloma

- Often seen on imaging as a small mass within a dilated ductal system.
- The mass is usually biopsied under ultrasound guidance.
- Papillomas are usually benign but are generally removed.
- Multiple papillomas associated with increased breast cancer risk

Case study

Fiona, 31 year old.

2 months of severe pain in her breasts, right greater than left

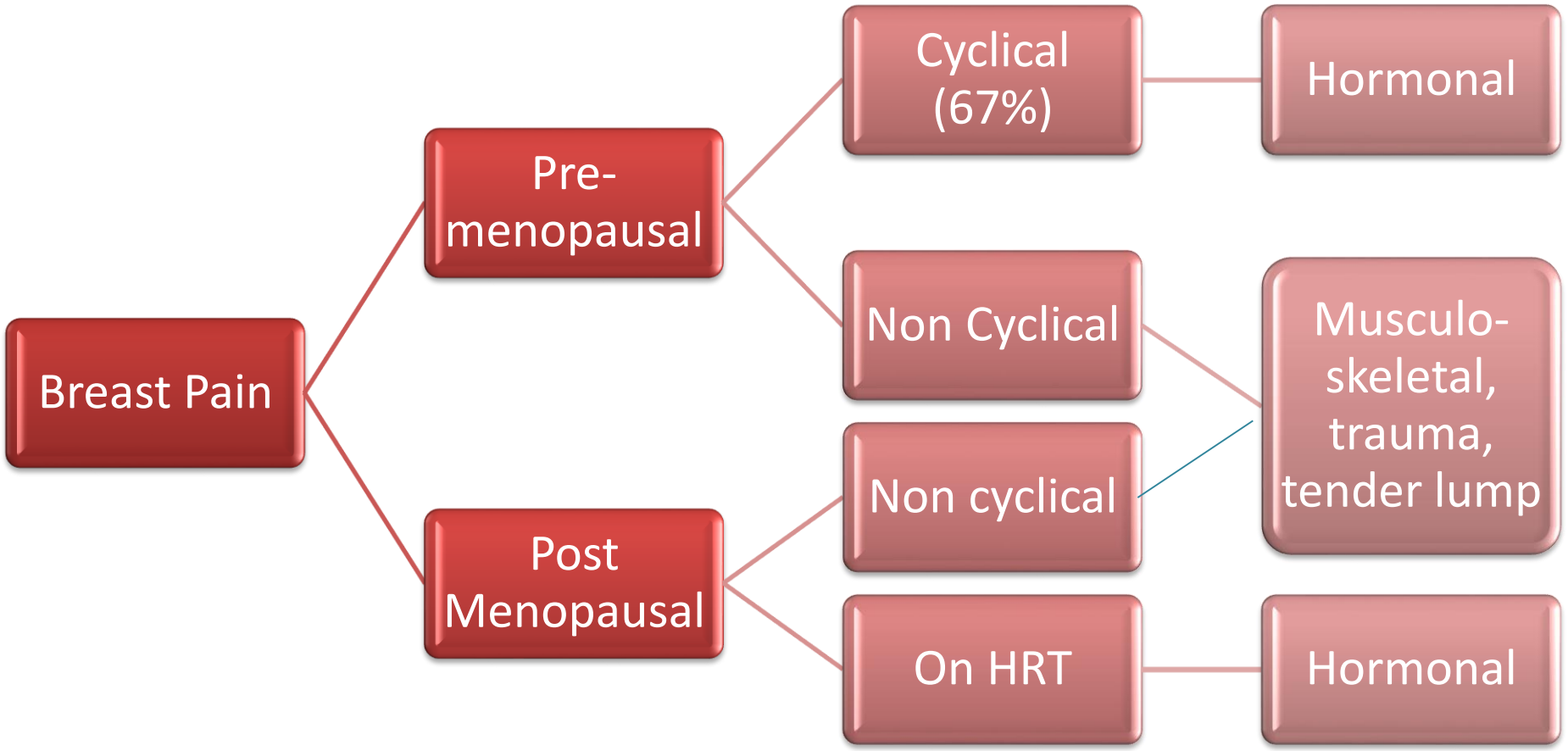
Breasts very lumpy and can't examine herself

Pain is stopping her physical relationship with her husband.

On examination she has DD cups, generally lumpy, generally tender breasts. She is on no medication other than the pill.

What would you do?

Breast Pain


Breast Pain
Pre-menopausal
Post Menopausal
Cyclical (67%)
Non Cyclical
Non cyclical
On HRT
Hormonal
Musculo-skeletal, trauma, tender lump
Hormonal

Cyclical Breast Pain

- Extremely common
- Breast swelling, tenderness
- Usually in the week prior to menstruation
- Settles after menses commences
- Usually mild, self limiting and lasts for a few cycles only
- Aetiology? Poorly understood. No consistent histological correlates, no endocrine correlates

Management

- Breast pain diary for 2-3 cycles to confirm cyclicity and severity

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Degree of *Breast Pain																															
+Bleeding Episodes																															
Comments	My Breast Pain for …… was Better Worse No Change																														

Management

- Reassurance. NSAIDs PRN. Low fat diet and avoid methylxanthines (coffee, tea, chocolate)
- Ensure has correctly fitting bra (70-80% don't!)
- Reassure: usually settles within a few months
- No benefit to Evening Primrose Oil derivates, vitamins, diuretics.
- If very severe, may consider danazol, bromocriptine, tamoxifen, GNRH agonists and even surgery.

Non Cyclical

- If focally tender, refer for imaging assessment and treat any underlying cause.
- Most commonly due to pulled pectoral or serratus muscles.
- Rarely due to a cancer (but consider, especially in an older woman).

Take home messages

- If in doubt, refer.
- All breast referrals are seen within 2 weeks
- For those patients with no symptoms but a family history, refer to Family history clinic