BREAST
AUCKLAND

Breast Pain

Breast pain is very common, affecting most women at some point in their lives. Assessment of women presenting to primary care is initially aimed at differentiating between true breast pain and referred pain from the chest wall. Subsequent management will be dictated by the severity of symptoms and the type of pain.

Referred pain is usually unilateral, sharp, associated with activity and reproduced by pressure on the chest wall. The pain may be localised but may radiate to the axilla, inframammary region or behind the nipple.

Possible Aetiology;
Trauma
Pectoralis major muscle related activities (eg.raking, rowing, shovelling or gym work)
Costochondritis (causes parasternal discomfort)
Radicular chest wall pain (may be secondary to cervical arthritis),
Intercostal neuralgia (causes include chest infection, herpes zoster, underlying pleural lesion)

True Breast Pain can be either cyclical (2/3) or non-cyclical (1/3)

Cyclical breast pain - symptoms common and usually a normal response to hormonal changes in the cycle

Bilateral /diffuse
Worse in the upper outer quadrants
Associated with swelling and nodularity
Worse prior to and resolves after menstruation
May be exacerbated by exogenous hormones (OCP) and peri-menopausal when hormone levels fluctuate.

Cyclical mastalgia is more severe and persistent than normal cyclical breast pain and can interfere with activity and impair quality of life. The cause is unknown but proposals include increased breast tissue receptor sensitivity due to a raised ratio of saturated fatty acids to essential fatty acids, excess oestrogen or prolactin and insufficient progesterone.

Non Cyclical breast pain is usually unilateral with variable locations in the breast.

Possible Aetiology
Stretching of Coopers ligaments due to large pendulous breasts
Duct ectasia - distension of subareolar ducts

Macrocysts - also cyst rupture can cause acute severe localised pain
Mastitis / other sources of infection in the breast
Nicotine increases epinephrine levels and its stimulatory effect on c-amp HRT
Thrombophlebitis
Inflammatory breast cancer
Post breast cancer treatment

Assessment

Full history of pain and impact on daily life.

Full breast examination including lymph node basins

Chest wall examination - lie patient on each side to palpate lateral chest wall and contralateral costochondral regions.

Mammography - women > 35 years to exclude occult malignancy. Value not proven and yield is low if physical examination is normal. However approx 5% of women with breast cancer complain of pain and 2.7% present with pain as their main problem.

Ultrasound – women < 35 yrs with a palpable abnormality.

Note - the finding of a lump requires formal imaging, biopsy and appropriate further management. Referral recommended.

Management

If there is no underlying pathology detected on examination or imaging, then reassurance may be all that is required. Patients who have severe pain should be asked to complete a pain diary prior to consideration of prescription medications.

General symptomatic relief may be obtained by use of a well fitting brassiere and use of a proper sports bra when exercising.

Referred Pain

Treatment is with oral or topical non-steroidal anti-inflammatory drugs. Persistent point tenderness causing severe pain, can be managed with injection of local anaesthetic and steroid, which can be both diagnostic and therapeutic.

True Breast Pain

Many recommendations are based on data from observational or case control studies.

Low fat diet – has shown improvement in symptoms in some non blinded studies

Elimination of caffeine - not been shown to be effective in controlled trials

Evening primrose oil - not been shown to provide benefit in two randomised, crossover double blinded trials comparing it to placebo. However some patients describe benefit. If used, it needs to be taken daily for up to three months to obtain any benefit.

Agents such as Agnus cactus (a fruit extract) and phytooestrogens (eg soya milk) have been shown to have some benefit.

HRT - reduction of dose or discontinuation may provide some benefit.

Tamoxifen or danazol provide the most effective relief in severe breast pain although tamoxifen is not licensed for use in mastalgia. Studies have shown Tamoxifen is superior to danazol with fewer adverse effects. 53% of patients receiving Tamoxifen were pain free at 1 year cf 37% with danazol. Tamoxifen 10mg or danazol can be given during the luteal phase of the cycle with similar improvements but a marked reduction in side effects.

Bromocriptine – seldom used as high rate of adverse effects

SSRI's - useful as part of premenstrual syndrome.

Prognosis

Variable and is influenced by age of onset and nature of the pain. Up to 30% of women with cyclical breast pain experience resolution in 3/12 but relapses are common. In contrast non cyclical pain resolves spontaneously in 50% of women.