

Management of benign breast conditions



Part 1 – painful breasts

Meagan Brennan, BMed, FRACGP, DFM, is a breast physician, NSW Breast Cancer Institute, Westmead Hospital, New South Wales. meaganb@bci.org.au

Nehmat Houssami, MBBS, FAFPHM, FASBP, PhD, is Associate Clinical Director, NSW Breast Cancer Institute, Westmead Hospital, Honorary Senior Lecturer, Screening and Test Evaluation Program, School of Public Health, The University of Sydney, New South Wales.

James French, MBBS, FRACS, is Breast and Endocrine Surgeon, NSW Breast Cancer Institute, Westmead Hospital, New South Wales.

This is the first article in a series on breast disorders with an emphasis on diagnosis and management in the general practice setting. This article provides an overview of the investigation of patients with a breast symptom and discusses the assessment and management of mastalgia.

Breast symptoms are a frequent reason for women to consult their general practitioner. While breast cancer is a common disease, affecting up to one in 11 Australian women in their lifetime, the overwhelming majority of breast symptoms are caused by physiological or benign, rather than malignant processes in the breast. For many women, a great deal of anxiety is associated with experiencing a breast symptom. Much of the GP's role therefore, is to exclude cancer, provide an explanation of the nature of the condition, and educate and reassure the patient that the symptom is not dangerous.

Investigation of a breast symptom

A thorough history and physical examination is required for any woman presenting with a breast symptom. This will guide further appropriate investigation that may include:

- early clinical review
- breast imaging: breast ultrasound and/or mammography depending on the clinical findings and age of the patient, and
- breast biopsy: fine needle aspiration biopsy, core biopsy, vacuum assisted core biopsy (VACB), or open surgical biopsy.

Note that triple testing (a combination of clinical examination, imaging, and nonsurgical biopsy) is essential for all women who have a significant clinical finding such as an asymmetrical thickening or a discrete palpable mass.² Interpretation of the triple test result is also critical. If there is any inconsistency, or all three parts of the triple test are not definitely benign, referral for further assessment is required.

Further information about investigation of breast symptoms and the use of the triple test can be found in the National Breast Cancer Centre's guide for general practitioners.³

Mastalgia

Mastalgia (breast pain) affects up to 77% of women at some time in their lives,⁴ and is so common it is considered part of a normal bodily process rather than a disease. Mastalgia may be accompanied by breast tenderness, lumpiness, fullness, heaviness, or a noticeable increase in breast size. Mastalgia is not usually a sign of breast cancer or other breast disease. Doctors often think it a trivial symptom, but for many women it causes significant discomfort and anxiety.

Mastalgia is classified as cyclical, ie. varying during the menstrual cycle, or non-cyclical. Cyclical mastalgia accounts for the majority of breast pain and is most common in premenopausal women in their 30s.

Cyclical mastalgia:

 varies with the menstrual cycle, increases progressively from mid cycle and is usually relieved with the onset of menstruation

- is usually located in the upper outer quadrants of the breasts
- is often bilateral
- is often described as discomfort, fullness, or heaviness with a dragging or aching quality.

Noncyclical mastalgia is defined as pain that does not vary with the menstrual cycle. It may be continuous or intermittent. It is less common than cyclical mastalgia and more common in women in their 40s. Noncyclical mastalgia:

 is usually unilateral, localised to one part of the breast; commonly the inner part of the breast or behind the nipple

- is described as having a burning, stabbing, or throbbing quality
- is more likely than cyclical mastalgia to be associated with breast pathology such as a cyst, fibroadenoma or duct ectasia, and
- may be caused by chest wall problems such as costochondritis.

Investigation and management

Any woman with a breast symptom, including significant mastalgia, requires breast imaging. Ultrasound and/or mammography are indicated depending on the age of the woman

and clinical findings. Ultrasound may not be useful in the evaluation of generalised mastalgia, but may contribute information for very localised areas of pain. If imaging is normal and there are no worrying clinical findings, the patient should be reassured and given information on managing breast pain (see *Patient education* page 145 this issue). Further treatment options are listed in *Table 1*.

Conclusion

For many women, mastalgia is a cause of significant discomfort and anxiety, but it is not usually a sign of breast cancer or other breast disease. Cyclical mastalgia accounts for the majority of breast pain and is most common in premenopausal women.

Noncyclical mastalgia is more common in older women and more likely than cyclical mastalgia to be associated with breast pathology. In most cases, explanation that the pain is not caused by breast cancer, reassurance, and simple measures are all that is required. There is a trend for all mastalgia to improve over time, regardless of the treatment given. This should be stressed to the patient.

Conflict of interest: none declared.

References

- Available at: www.aihw.gov.au. Accessed June 2004.
- Irwig L, Macaskill P, Houssami N. Evidence relevant to the investigation of breast symptoms: the triple test. Breast 2002;11:215-20.
- The investigation of a new breast symptom: a guide for general practitioners. National Breast Cancer Centre, 1997.
- Mansel RE. Breast pain. In: Dixon JM, editor. ABC of Breast Diseases. 2nd ed. London: BMJ Publishing Group 2000;16-20.
- Gateley CA, Miers M, Mansel RE, Hughes LE. Drug treatments for mastalgia: 17 years experience in the Cardiff Mastalgia Clinic. J R Soc Med 1992;85:12-5.
- Pye JK, Mansel RE, Hughes LE. Clinical experience of drug treatments for mastalgia. Lancet 1985;17:373-7.
- Tahsin C, Turgut I, Arzu K, Zekai O, Suha A. Efficacy of topical nonsteroidal anti-inflammatory drugs in mastalgia treatment. J Am Col Surgeons 2003;196:525–30.



Correspondence

Email: afp@racgp.org.au

Table 1. Management of mastalgia

- Reassure the patient that her symptoms are not dangerous and not caused by breast cancer
- · Ask the patient to complete a pain chart
 - it will help to characterise the pattern of pain: cyclical or noncyclical
- Advise the patient to wear a well fitting bra
 - a supportive bra (eg. sports bra) has been shown to reduce breast discomfort
- · Evening primrose oil
 - there is some evidence in randomised trials that evening primrose oil, taken orally on a regular basis, may reduce mastalgia in some women^{5,6}
 - a dose of 1000 mg 2–3 times per day for 2–3 months is usually required for relief of symptoms
- · Other dietary changes and vitamin supplements
 - evidence does not support the recommendation of vitamins B1, B6, E, or special diets for breast pain
- Pain medication
 - simple analgesics such as paracetamol are useful for women who only experience mastalgia for a few days each menstrual cycle
 - there is some evidence to support the use of topical nonsteroidal antiinflammatory medication for breast pain⁷
- Oral contraceptive pill (OCP)
 - some women find their mastalgia improves on the OCP, while others find it exacerbates symptoms
 - high dose oestrogen OCPs are more likely than others to exacerbate mastalgia
- · Other hormonal medications
 - for severe cases of mastalgia, medications such as danazol, tamoxifen, and bromocriptine are of use (although their use is limited by side effects)^{5,6}
 - patients being considered for these medications should be referred to a specialist breast surgeon, gynaecologist, or endocrinologist for discussion
- · Complementary therapies
 - some women get relief from relaxation therapy, acupuncture, and applied kinesiology, but their role remains unclear
- In uncommon cases where breast pain is caused by large cysts or fibroadenomas, aspirating or removing these can relieve the discomfort

Breast pain

The New South Wales Breast Cancer Institute.



Breast pain (mastalgia) is so common it is considered to be a normal bodily process rather than a disease. Some women experience severe discomfort due to the extremes of these normal changes. Breast pain may be accompanied by breast tenderness, lumpiness, fullness, heaviness, or a noticeable increase in breast size. It is not usually a sign of breast cancer or other breast disease. It is important to see your GP to exclude causes of breast pain that require specific treatment.

Breast pain related to your menstrual cycle

Most breast pain varies in its intensity with the menstrual cycle (it is 'cyclical'). It can cause discomfort, fullness, and heaviness in the breasts, increasing progressively from the middle of the menstrual cycle and peaking 3–7 days before each period. The pain is relieved when the period begins.

Breast pain not related to your menstrual cycle

Breast pain that doesn't vary with the menstrual cycle is called 'noncyclical'. The pain can be random and intermittent, or continuous. It can have a burning, stabbing, or throbbing characteristic. Often no cause can be identified for this type of breast pain. In some cases it can be caused by benign breast changes such as cysts, fibroadenomas, and age related changes in the milk ducts under the nipple. Symptoms such as a breast lump or nipple discharge, especially if bloodstained, need to be investigated promptly.

Chest wall pain

Pain that is felt in the breast doesn't always originate from the breast tissue. Nonbreast causes of breast pain include chest wall pain from muscles, ribs, and ligaments. This pain may occur after an injury or physical activity, or it may be unexplained. Treatment consists of rest and pain medication eg. paracetamol or anti-inflammatory tablets. Heat treatment and physiotherapy may also help.

Managing breast pain

Keep a pain chart

Mapping the pattern of pain will determine whether the pain is cyclical, and on which days symptomatic relief may be required.

Wear a well fitting bra

A well fitting and supportive bra (eg. a sports bra) can significantly reduce breast pain. Have a bra specially fitted by trained staff.

Diet and vitamin supplements

While there is no strong evidence that specific dietary changes such as reducing caffeine intake and the use of supplements such as vitamins B1, B6, and E improve symptoms, some women may find them beneficial. Evening primrose oil is helpful for many women. Your doctor can discuss the appropriate dose and length of treatment.

Pain medication

Simple pain medication such as paracetamol can reduce mastalgia. This is of particular benefit for women who get cyclical mastalgia that is only present for a few days each month. Topical anti-inflammatory medication in the form of gel applied over the tender areas may be effective.

Oral contraceptive pill

Some women with cyclical mastalgia find their symptoms improve on a low dose oral contraceptive pill. Other women find that the contraceptive pill worsens their symptoms. You may wish to discuss a trial of the pill with your GP.

Complementary therapies

Other treatments such as relaxation therapy, acupuncture, and applied kinesiology have been tried, but their role remains unclear.

Other medication

For severe cases of mastalgia that interfere with lifestyle, there are strong hormonal medications such as danazol and tamoxifen. These may have significant side effects and their use needs to be strictly monitored by your GP in consultation with a specialist.

Pain caused by benign (noncancerous) breast disease

If breast pain is caused by cysts or fibroadenomas, aspirating or removing these can relieve the discomfort.

Most women find that their pain improves over some months with the measures discussed above.
Your GP will discuss the best treatment options with you and monitor your symptoms.

Adapted from: 'Mastalgia' fact sheet. The NSW Breast Cancer Institute www.bci.org.au