Mastalgia is estimated to affect more than 70% of women at some stage in their lifetime. It is the most common breast symptom reported in general practice and may be accompanied by breast tenderness, lumps, heaviness or changes in breast size.

In some women, the pain is severe enough to affect quality of life — specifically, sleep quality, and sexual, physical and social activities. It tends to be more common in women aged between 30 and 50, but usually disappears after menopause.

**EVALUATION**

Initial patient evaluation will include a detailed clinical history and a physical examination, checking both breasts and axillae for lumps, nipple discharge, changes in skin texture or temperature, dimpling or rashes.

A clinician should ask about the location of the pain, if there is involvement of the axilla or if it radiates down the arm, if it is bilateral or unilateral, diffuse or focal, when it occurs during the menstrual cycle, how long it has been present and the duration of each episode.

Note the patient’s description of the pain, for example, stabbing, sharp, throbbing, dragging or tingling. Inquire about the level of pain, on a scale of 0-10.

Many breast clinics ask their patients to keep a pain diary for two
months, spanning two menstrual periods, to aid differentiation between cyclical and non-cyclical mastalgia.

The Cardiff breast pain chart is the most commonly used and uses a square to indicate severe pain, a triangle to indicate mild pain and a circle to indicate no pain.

If no lump or similar pathology is detected, get the patient to keep a pain diary but ensure she is booked in for follow-up in two months.

Inquire about medications being taken, as some contraceptives and hormonal medications can cause mastalgia.

Mastalgia is not usually a sign of breast cancer or other significant breast disease. Patients, however, often present with anxiety because they fear malignancy, so they might benefit from reassurance during consultation.

If a lump is detected, the triple test approach is necessary to exclude cancer. This diagnostic approach must include the following components:

- Medical/family history and clinical breast examination
- Imaging, mammogram and/or ultrasound (+/- MRI)
- Non-excisional biopsy; a fine needle aspiration (FNA) cytology and/or core biopsy.

**DIFFERENTIAL DIAGNOSIS**

Mastalgia can be classified as either cyclical or non-cyclical. Non-cyclical mastalgia features extra-mammary pain.

The woman’s age, parity, family history, stage of menstrual cycle and reproductive status all add to the diagnostic picture. The aetiology of this condition is not well understood but it is considered to be multifactorial.

Localised pain may be caused by a focal disorder such as a breast cyst or mastitis. Diffuse bilateral pain may be caused by fibrocystic breast changes or, more rarely, diffuse bilateral mastitis.

Cyclical mastalgia: It is usually worse during the luteal phase of the menstrual period, due to water retention in the stroma of the breast, caused by increasing hormone levels.

The pain tends to be bilateral, diffuse and often worse in the upper, outer quadrant of the breast. It may extend to the axilla and down the medial aspect of the arm.

Women may complain of an increase in breast size with a heavy dragging pain, lumpiness and increased breast tenderness. This is the most common form of mastalgia and tends to disappear once menopause is reached.

**Non-cyclical mastalgia:** Unrelated to the menstrual cycle, this pain may be unilateral or focal.

Aetiology could be injury, trauma, musculoskeletal issues such as costochondritis, cervical vertebra issues or strain of the Cooper’s ligaments, especially in women with large or pendulous breasts.

A range of medications can cause non-cyclical mastalgia, including oral contraceptives, hormonal treatments, antidepressants (SSRIs) and some cardiac drugs such as digoxin (Lanoxin, Sigmaxin) and spironolactone (Aldactone, Spiractin).

Other causes include fibrocystic breast changes, breast cysts, mastitis, breast surgery and a poorly fitted or unsupportive bra. Breast cancer can also be a cause but this is rare; some forms of inflammatory breast cancer cause pain. Strain in the pectoralis major muscle can also mimic breast pain.

**MANAGEMENT TIPS**

- Wearing a supportive bra, such as a sports bra, will help reduce pain, which is especially important for women with large breasts or those who take part in sports. It’s worth noting that bras lose their elasticity with time and may need to be replaced regularly.
- Paracetamol or NSAIDS should reduce cyclical pain. If the pain is severe, a brief course of danazol or tamoxifen can be considered, but the side effects of these drugs are a concern.
- Supplements such as vitamins B6, B1, E or evening primrose oil are used by some clinicians, but there is no scientific evidence to support this. High caffeine intake has been linked to mastalgia, but the research is not conclusive.

**References on request**

This column is supplied by Jean Hailes for Women’s Health — a national, not-for-profit organisation focusing on clinical care, innovative research and practical educational opportunities for health professionals and women. www.jeanhailes.org.au