Breast pain - cyclical - Management

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safe practical clinical answers - *fast*

How do I know my patient has cyclical breast pain?

- Clinical features that indicate a diagnosis of cyclical breast pain include:
  - Pain that varies in intensity from one menstrual cycle to another.
  - Pain relating to the same time in the cycle, usually starting 1–3 days before the onset of menses and improving after menses.
  - Tender breasts without a discrete lump but with generalized swelling and lumpiness.
  - Pain localized to the upper outer quadrant of the breast and extending to the axilla.
- For women with moderate-to-severe pain, consider the use of a breast pain record chart to aid diagnosis.
  - Include a daily pain score recorded on a visual analogue scale.
  - Use the chart for at least 2 months to assess the severity and timing of breast pain.
  - Analyse the chart for features indicative of cyclical breast pain.
- Exclude:
  - Pregnancy.
  - Malignancy (refer urgently) suggested by:
  - Women 30 years of age and older with a discrete lump that persists after the next menstrual period, or presents after the menopause.
  - Women younger than 30 years of age with a lump that enlarges, or has other features associated with cancer (fixed and hard), or in whom there are other reasons for concern (such as family history).

- Women who have previously had histologically-confirmed breast cancer, who present with a further lump or suspicious symptoms.
- Unilateral eczematous skin, or nipple changes, or nipple distortion of recent onset.
- Spontaneous unilateral bloody nipple discharge.
- Infection, suggested by:
- Localized breast swelling, redness, warmth, and pain.
- Associated systemic symptoms such as fever, vomiting, and discharge from a lump or the nipple.

Basis for recommendation

- These recommendations are based on guidelines published by the National Institute for Health and Clinical Excellence (NICE) [NICE, 2005] and on expert opinion [Dixon and Mansel, 1994; Mansel, 1994; Vaidyanathan et al, 2002].
- The urgent (2 week) referral criterion for suspected breast cancer in women with breast pain reflects guidelines on referral published by NICE [NICE, 2005].

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What is first-line treatment for cyclical breast pain?

- Reassurance that there is no serious underlying pathology may be all that is required.
- Consider the following treatment options:
  - A better-fitting bra during the day.
  - Soft support bra at night.
  - Oral paracetamol and/or ibuprofen, as required.

- Topical nonsteroidal anti-inflammatory preparation, as required.

▪ Consider asking the woman to keep a pain chart, if she is not already doing so, to assess the benefits of treatment.

▪ In general, continue treatment for 6 months before considering second-line treatment.

Additional information

Medications that may cause breast pain (although not often cyclical) include:

- Other hormonal medication, such hormone replacement therapy (HRT).
- Antidepressants, antipsychotics, and anxiolytics, including sertraline, venlafaxine, and haloperidol.
- Antihypertensive and cardiac medication including spironolactone, methyldopa, and minoxidil.
- Antimicrobials, including ketoconazole and metronidazole.

Basis for recommendation

▪ These recommendations are based on expert opinion [Dixon and Mansel, 1994; Vaidyanathan et al, 2002; Bundred, 2007], and trial evidence when available.

Reassurance

▪ Two epidemiological studies suggest that women with cyclical breast pain (and no other features of malignancy) have a lower risk of breast cancer.

- A matched cohort study compared the prevalence of breast cancer in 987 women referred for imaging because of breast pain and 987 women referred for screening mammography [Duijm et al, 1998]. In women with breast pain the prevalence of breast cancer was 0.4%, and in women having screening mammography the prevalence was 0.7%.
- A study of women consulting a specialist breast care centre found that the risk of breast cancer was lower in women with breast pain: the odds ratio for

breast cancer adjusted for risk factors (early menarche, late first birth, late menarche, hormone treatment, positive family history of breast cancer) was 0.63 (95% CI 0.49 to 0.79) [Khan and Apkarian, 2002].

Wearing a well-fitting bra and cyclical breast pain

- The advice to wear a well-fitting bra is based on expert opinion. There is limited evidence from a case series to suggest that a well-fitting bra reduces cyclical breast pain. The recommendation for wearing a soft support bra at night is pragmatic and there is no evidence to support this.

Simple oral analgesia as first-line treatment for cyclical breast pain

- The recommendation to offer simple oral analgesia as first-line treatment is pragmatic.

Topical nonsteroidal anti-inflammatory drugs (NSAIDs) for cyclical breast pain

- There is evidence from one randomized controlled trial that topical NSAIDs may be more effective than placebo in reducing breast pain. Irregular usage and abruptly stopping treatment created no serious problems.

What is the second-line treatment for cyclical breast pain?

- If the pain is severe enough to affect quality of life and does not respond to first-line treatment:

  - Ask the woman to keep a pain chart for a minimum of 2 months (if she has not already done so) to evaluate the severity and timing of the pain, and its response to treatment.

  - Consider referring to a specialist for other treatment options including:

  - Danazol (an anti-gonadotrophin).

  - Tamoxifen (an oestrogen-receptor antagonist).

  - Goserelin injections (a gonadorelin analogue inhibiting gonadotrophin release), used in conjunction with hormone replacement therapy to relieve adverse effects.

  - Gestrinone (inhibits pituitary gonadotrophin).

- Toremifene (a selective oestrogen-receptor modulator).

Basis for recommendation

- This recommendation is based on expert opinion in review articles [Dixon and Mansel, 1994; Vaidyanathan et al, 2002; Bundred, 2007], and trial evidence when available.

- There is evidence from randomized controlled trials to suggest that danazol, tamoxifen, gestrinone, goserelin, and toremifene reduce cyclical breast pain compared with placebo.

- However, these treatments can cause unpleasant and serious adverse effects including: for danazol, weight gain, deepening voice, menorrhagia, and teratogenicity; for tamoxifen, vaginal bleeding, vaginal discharge, increased risk of thromboembolism, and endometrial cancer; for gestrinone, hirsutism, acne, and depression; for goserelin, vaginal dryness, hot flushes, acne, and depression; and for toremifene, deep vein thrombosis and teratogenicity.

- CKS therefore advises that these medications are limited to use by specialists or those with a specialist interest in the management of breast pain.

Which treatments are not recommended for cyclical breast pain?

- Treatments that should not routinely be used in treating cyclical breast pain include:

- Stopping or changing other medication, including combined oral contraceptives.
- Evening primrose oil.
- Progestogen-only contraceptives.
- Diets low in fat and high in carbohydrate, or low in caffeine.
- Antibiotics.
- Diuretics.
- Pyridoxine.
- Tibolone.
- Vitamin E.

Basis for recommendation

Changing or stopping medication

- Changing current medication to treat breast pain is not advised as there is little evidence to suggest a link between any drug treatment and the onset of cyclical breast pain.

- There is no evidence to suggest that the use of combined oral contraceptives causes cyclical breast pain. Premenstrual breast pain may improve with oral contraceptive use.

Evening primrose oil

- There is evidence from a systematic review of four randomized controlled trials to show that evening primrose oil is no more effective than placebo at reducing the frequency and severity of breast pain. For this reason the Committee on Safety of Medicines withdrew the prescription licence from evening primrose oil to treat breast pain. However, the placebo effect is significant and, as the adverse effects are minor and the oil is not being used to treat a pathological disorder, women who believe it to be beneficial do not need to be advised against it.

Progestogen-only contraceptives

- There is weak evidence from a cross-sectional survey to suggest that parenteral medroxyprogesterone acetate reduces cyclical breast pain, but it is insufficient to recommend this as a treatment.

- There is weak evidence that oral progestogen (oral medroxyprogesterone) is no better than placebo at treating breast pain.

Diet changes

- There is little evidence to suggest that a diet low in fat and high in carbohydrate, or a diet low in caffeine, is beneficial for the treatment of cyclical breast pain.

Other medication

o There is a lack of evidence to suggest a benefit from the use of antibiotics, diuretics, pyridoxine, or vitamin E. Even though there is a placebo effect from these agents, they have potential adverse effects themselves and should not be used for the treatment of breast pain.

Prescriptions

For information on contraindications, cautions, drug interactions, and adverse effects, see the electronic Medicines Compendium (eMC) (http://emc.medicines.org.uk), or the British National Formulary (BNF) (www.bnf.org).

Oral analgesia

Age from 12 years onwards

Paracetamol tablets: 500mg to 1g up to four times a day

Paracetamol 500mg tablets
Take one or two tablets every 4 to 6 hours when required for pain relief. Maximum of 8 tablets in 24 hours.
Supply 50 tablets.

Age: from 12 years onwards
NHS cost: £0.78
Licensed use: yes

Ibuprofen tablets: 200mg to 400mg three to four times a day

Ibuprofen 200mg tablets
Take one or two tablets 3 to 4 times a day when required for pain relief. Do not exceed the stated dose.
Supply 56 tablets.

Age: from 12 years onwards
NHS cost: £1.38
OTC cost: £2.43
Licensed use: yes

Topical analgesia: diclofenac

Age from 12 years onwards

Diclofenac 1% gel: apply three to four times a day

Diclofenac 1% gel
Gently massage a circular shaped mass of approximately 2.0 to 2.5cm in diameter (2 to 4g) to the affected area 3 to 4 times a day.
Supply 100 grams.

Age: from 12 years onwards
NHS cost: £7.00
Licensed use: no - off-label indication