Information for GP's on Breast Pain

NHS Northern Cancer Alliance

Incidence and types

- 70% of women will present with breast pain at some point [1].
- Cyclical breast pain resolves spontaneously in 20% to 30% of women, but tends to recur in 60% of women.
- Non-cyclical pain responds poorly to treatment but tends to resolve spontaneously in 50% of women.
- Breast pain can be broken down in 4 categories, which can affect treatment strategies:
    - Cyclical
    - Hormonal but medication related
    - Non-cyclical and non-hormonal
    - Referred musculoskeletal

Risk

Patients can be reassured that breast pain alone is not a symptom of cancer. The risk of finding cancer in a patient with breast pain is lower than the screened population incidence.

Evidence of Risk

A survey of 8504 women with breast pain followed over 10 years revealed an overall incidence of cancer of 2.7%[5], a more recent cohort 10,000 patients presenting to breast clinic showed that breast pain alone carries a cancer rate of 0.4%, this rises to a 5.4% rate if they have a distinct lump [6]. Putting this into context - UK Breast Cancer Screening detects 9.1 cases per 1000 women. That is 0.91%.

Management in Primary Care [2]

Suggested first line management in primary care would be the following:

- Pain history including family history, breast examination
- Counselling on baseline/low risk of associated breast cancer
- Assessment of anxiety related to family history (NICE CG164 - refer if moderate or high)
- Recommend bra fitting
- Topical NSAIDS

See Primary Care Flowchart for more detail.

Other interventions that can be considered

Change in medication: SSRIs and the OCP both cause breast pain and while these may be essential to the patient, considering a switch may help. HRT is well known to cause breast pain. In Womans' Health Initiative trial of 16,000 women who took combined HRT vs placebo – breast pain was 3 times more common when on cHRT [3]. A subsequent study showed that at lower doses there was no increase, so a compromise at a lower dose may help [4].

Vitamin E supplements may help and are not harmful see Footnote. Gamma linoleic acid containing natural remedies such as star oil or evening primrose (EPO) are not harmful. So, while there is no objective evidence that they work, they are still included in management.

There are other management options but these would only be available after referral into secondary care due to the balance of benefit/adverse effects.

Evidence and References

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Evidence for management strategies

Overall trials are small and of relatively poor quality. The management strategies are listed in order of evidence. This does not mean that such interventions are not effective, it means that the evidence available is judged less reliable by standardized assessment methods. It is recommended that a basket of interventions can provide most benefit rather than one intervention alone.

1. **Topical NSAIDS (diclofenac, ibuprofen) -** There is evidence that topical diclofenac is effective in relieving breast pain and should be considered first line. Side effects are outweighed by benefits.
2. **Topical vs Oral NSAIDS** - Data from studies either showed no difference or was not assessed. We don't know whether oral NSAIDs are more effective than placebo at reducing breast pain due to insufficient evidence. We don't know whether topical NSAIDs are more effective than oral NSAIDs at reducing breast pain.
3. **Supportive bra** - There are no RCTs but this intervention is commonly advised. While breast support is effective in reducing the amplitude of breast displacement during walking and running, there is no research studying its effect on breast pain.

References

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2. A Goyal. BMJ Clin Evid 2011 Jan 17;2011:0812.
3. Files JA et al. Effects of different hormone therapies on breast pain in recently postmenopausal women: findings from the Mayo Clinic KEEPS breast pain ancillary study. J Womens Health (Larchmt). 2014 Oct;23(10):801-5. doi: 10.1089/jwh.2014.4871. Epub 2014 Sep 30.
4. Srivastava A et al.. Evidence-based management of Mastalgia: a meta-analysis of randomised trials. Breast. 2007 Oct;16(5):503-12. doi: 10.1016/j.breast.2007.03.003. Epub 2007 May 16. PMID: 17509880.
5. RV Dave et al. No association between breast pain and breast cancer: a prospective cohort study of 10 830 symptomatic women presenting to a breast cancer diagnostic clinic. British Journal of General Practice 2022; 72 (717): e234-e243. DOI: https://doi.org/10.3399/BJGP.2021.0475
6. Crandall CJ et al. Breast tenderness and breast cancer risk in the estrogen plus progestin and estrogen-alone women's health initiative clinical trials. Breast Cancer Res Treat. 2012 Feb;132(1):275-85. doi: 10.1007/s10549-011-1848-9. Epub 2011 Nov 1.

FOOTNOTE:

Advice on giving Evening primrose oil

Exclude patients with epilepsy and ensure it is stopped if they find they are pregnant or decide they want children. Advise if it gives them diarrhoea and or vomiting and they take the oral contraceptive pill to use barrier method of contraception. Dosage - 500mg evening primrose oil (from anywhere) take 2-6 tablets daily. Advise it may upset stomach and give a headache, advise building up slowly – i.e. 1 tablet daily for 3 weeks, 2 tablets daily 3 weeks, etc.

Information for GP's on Breast Pain - Flow Chart

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Key:

- Primary Care
- Secondary Care
- Family history assessment based on NICE CG164 or FaHRAS toolkit

Take history including enquiring about family history

EXAMINE BREASTS

Clinical sign present e.g. lump, discharge

No breast lump or other clinical signs on examination

Refer to breast clinic as appropriate

Family history suggested near population risk

Family history suggests moderate / high risk

Information

https://breastcancernow.org/information-support/have-i-got-breast-cancer/benign-breast-conditions/breast-pain

https://www.nhs.uk/conditions/breast-pain/

https://www.nhs.uk/common-health-questions/mens-health/what-is-gynaecomastia/

Reassurance:

- a) No association between breast pain alone and breast cancer
- b) Risk of breast pain only as a symptom of breast cancer is less than population risk

Refer to Family History / Genetics clinic

CYCLICAL

Management
(Same advice whether uni- or bilateral)

Review possible treatment options with patient. Can be offered concurrently.

- Advise to get bra fitting checked (& wear supportive underwear 24hrs/day).
- OTC treatment: Paracetamol 1g QDS, daily for 2 weeks.
- Stop if no improvement. Further 2 weeks if improvement.
- OTC treatment: NSAID topical gel for 2-3 months
- OTC treatment (not to be prescribed): Oil of evening primrose*(EPO). A standardised capsule of EPO (500mg) contains approximately 40mg of gamolenic acid (GLA). The dose is usually 120-160 mg of gamolenic acid twice daily

*A randomised controlled trial reported a 12% decrease in number of days with breast pain for evening primrose oil compared with 14% for placebo. NICE clinical knowledge summaries.

If no improvement or pain persists then refer to breast clinic for review

NON-CYCLICAL

Management
Consider causes of pain referred to the breast: e.g. costochondritis, axilla, idopathic, infections, periductal mastitis. If infective consider breast unit referral if necessary.

Review possible treatment options with patient. Can be offered concurrently.

- OTC treatment: Paracetamol 1g QDS, daily for 2 weeks.
- Stop if no improvement. Further 2 weeks if improvement.
- OTC treatment: NSAID topical gel for 2-3 months

If specific reason (e.g. new sign such as lump or infection) or persistent severe pain then refer to breast clinic