Breast pain

Breast pain can be distressing and difficult to live with. It’s not usually a sign that there’s something seriously wrong. Often there’s no obvious cause for breast pain. But there are some treatments that can help.

We’ve brought together the best research about breast pain and weighed up the evidence about how to treat it. You can use our information to talk to your doctor and decide which treatments are best for you.

What is breast pain?

Breast pain is also called mastalgia. It means that you have pain rather than just tenderness in your breasts. The pain can make you uncomfortable and worried. But it’s rarely a sign of a serious problem, such as breast cancer. Many women get breast pain. It is normal for your breasts to feel tender at certain times, such as just before your period, in early pregnancy, and when you are breastfeeding. This tenderness is caused by normal changes in your ‘hormones’. You probably won’t worry about these normal changes.

But you may worry if your breasts are painful rather than just tender, and the pain is so bad that it interferes with your life.

There are two main types of breast pain: [1]

- **Cyclical breast pain** is linked to your periods (menstrual cycle) and is worst just before your period. It is the commonest type of breast pain.

- **Non-cyclical breast pain** is not linked to your periods. It means that your breasts may feel painful some of the time, a lot of the time, or even constantly.

You may be worried that the pain in your breasts is due to cancer. But, in fact, pain on its own is not a common symptom of breast cancer. Less than 1 in 10 women with breast cancer have breast pain as their main symptom. [2] A study of women who had a mammogram (an X-ray of the breast) because they had breast pain found that they were no more likely to have cancer than women who didn’t have breast pain. [3]
Most women with breast pain never know the cause of their pain. Because cyclical pain is linked with periods, some doctors think hormone imbalances may be to blame. (Hormone imbalances occur when your body produces too much or too little of one or more hormones.) But there is no evidence that hormone imbalances cause breast pain. Other doctors think that cyclical pain is caused by water retention in your breasts before your period. But again there is no proof for this.

Breast pain that's not linked to periods (non-cyclical breast pain) can be caused by:

- Pregnancy
- A breast infection that affects breastfeeding mothers (mastitis)
- A knock or blow to your breast
- A cyst
- A tumour
- Inflammation of a vein in your breast (thrombophlebitis)
- A problem in the muscles, bones, or joints in your chest, such as arthritis.

But usually there's no sign that anything is wrong and the cause remains a mystery.

Lots of researchers have looked at whether breast pain is caused by psychological problems, such as depression and anxiety. Some of them found that women with breast pain were more likely to be depressed or anxious. But it could be that the women in the study got depressed because they had breast pain, not that their depression caused their breast pain.

What type of breast pain you get seems to change with age. You are most likely to get cyclical breast pain in your 20s and 30s. Non-cyclical breast pain tends to start later, usually in your 30s or 40s. But it can also start after the menopause.

What are the symptoms of breast pain?

It is normal for your breasts to feel tender at certain times, such as just before your period, in early pregnancy, and during breastfeeding. But if you have breast pain, your breasts are painful rather than just tender and the pain is bad enough to interfere with your life.

If you get breast pain linked to your periods (called cyclical breast pain), you may get these symptoms:

- The pain may start in the two weeks before your period
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• The pain can be dull, heavy, or aching
• The pain gets gradually worse until your period starts and then either gets better or goes away completely
• The pain may occur in your upper arm and your armpit as well as in your breast.

The pain may occur in both breasts, but it may be worse in one.

If you get breast pain not linked to your periods (called non-cyclical breast pain), you may get these symptoms:
• The pain comes and goes or is there all the time
• The pain is sharp and burning
• The pain may occur just in your breasts
• The pain may occur in just one breast.

Breast pain on its own is not a common symptom of cancer. (Breast pain that does sometimes come with cancer is usually on just one side, and it is constant and intense.) [6]

If your pain is bad enough to interfere with your life, it's a good idea to see your doctor. He or she will probably reassure you that there's nothing seriously wrong and give you advice about treatments that may help.

But you should see your doctor urgently if you have: [7]
• Discharge from your nipples
• A possible breast infection (you may have redness, pus, or fever)
• A new lump in one of your breasts
• Pain that does not go away.

How common is breast pain?

Breast pain is common. It tends to affect women aged between 30 and 50 years.

About 7 in 10 women get breast pain at some point in their lives. [8] [9] In the UK, breast pain is the second most common breast problem that women see their doctors about. The most common problem is a lump. [10] [11]
What treatments work for breast pain?

Many different treatments have been tried for breast pain. But there hasn't been much good research on how well they work.

- Applying a painkilling gel or lotion to your breast can help with the pain. The one that's been studied the most is called diclofenac. Another common option is a gel with ibuprofen.

- Some hormone treatments can help breast pain. They include the drugs danazol, gestrinone, goserelin, and tamoxifen. But these have side effects. Reducing the dose may help to avoid the side effects.

- There's no evidence that evening primrose oil helps breast pain.

Some treatments for breast pain are available over the counter. However, you may want to see your doctor before buying treatments yourself. Breast pain isn't usually a sign of anything serious, but it's a good idea to check with your doctor, if only to put your mind at rest.

Which treatments work best? We've looked at the best research and given a rating for each treatment according to how well it works.

Treatment Group 1

Treatments for breast pain

Treatments that are likely to work

- Painkilling gels or lotions

Treatments that work but whose harms might outweigh benefits

- Danazol
- Gestrinone
- Goserelin
- Tamoxifen

Treatments that need further study

- Low-fat, high-carbohydrate diet
- Vitamin B-6
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- Vitamin E
- NSAID tablets

Treatments that are unlikely to work
- Hormone replacement therapy (oestrogen)
- Antibiotics
- Diuretics
- Progestogens
- Tibolone

Treatments that are likely to be ineffective or harmful
- Bromocriptine
- Evening primrose oil

What will happen to me?

Breast pain is rarely a sign of a serious problem. Often it goes away on its own without any treatment. If your pain is mild, you may just need to be reassured that there's nothing wrong. But if your breast pain is severe, there are some treatments that can help.

If you are worried about breast pain, you should see your doctor. They will ask you questions about the pain and examine your breasts to make sure you don't also have signs of breast cancer.

The main signs of breast cancer are: [12]

- A lump
- A sore that won't heal
- A swelling in the skin (called a nodule)
- Other skin changes.

If your doctor thinks you may have breast cancer, they will refer you to a specialist for further tests.
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But if your doctor does not suspect cancer, they may ask you to keep a ‘pain diary’ to help them work out what type of breast pain you have and how bad it is. Most women (more than 8 in 10) are happy with reassurance and don't want any treatment for their breast pain.

You may find having a properly fitted bra or one with more support helps your breast pain. And if you exercise, wearing a sports bra may help. Out of the women who get breast pain linked to their periods (cyclical breast pain) about one-third find that it goes away on its own within three months.

Up to 2 in 10 women with breast pain opt for medical treatment. Treatment may help for a while. But up to 6 in 10 women find that the pain comes back eventually. Treatment seems to work less well for breast pain not linked to periods (non-cyclical breast pain). But about half the women who get this type of breast pain find it goes away on its own.

Treatments:

Painkilling gels or lotions

In this section

Doctors say that painkilling gels or lotions work well for breast pain and are safe. The one that has been studied the most is called diclofenac. It belongs to a group of drugs called nonsteroidal anti-inflammatory drugs (NSAIDs for short). These drugs reduce pain and inflammation.

One small study (a randomised controlled trial) found that half the women who used diclofenac had no pain after six months.

None of the women in the study had any side effects. But your skin may itch or go red and blister with these types of gels and lotions.

You can buy one brand of diclofenac gel from a pharmacy. It's called Voltarol Emulgel P. Other brands (Pennsaid and Solaraze) are available on prescription from your doctor. You can also get other NSAIDs, such as ibuprofen (Nurofen Gel, Ibuleve, and Care Ibuprofen Gel), at a pharmacy. You shouldn't use these products if you're pregnant or breastfeeding.

Danazol

In this section

Taking the drug danazol might reduce the pain in your breasts. One small randomised controlled trial found that two-thirds of women who took danazol had less pain after six months. Danazol worked as well as another drug called tamoxifen.
Breast pain

But this treatment can have side effects that you may not be able to put up with. In the study we found, one-third of the women who took danazol put on weight. Other side effects in that study were a deep voice, heavy periods, and muscle cramps. But you may be able to avoid these side effects if you take a smaller dose of danazol for the two weeks before your period, rather than all the time.

You need a prescription for danazol. It comes as capsules and the brand name is Danol.

You must not take danazol if you are pregnant or likely to become pregnant. Danazol can harm the unborn baby. If you are taking danazol, you need to use a non-hormonal method of contraception (for example, an IUD or condoms). The contraceptive pill doesn't work when you are taking danazol.

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**Gestrinone**

In this section

One small randomised controlled trial found that gestrinone can help to reduce breast pain.

But this treatment can have side effects that you may not be able to put up with. In the study we found, 4 in 10 women who took gestrinone got at least one of these side effects: greasy skin, increased body hair, acne, bleeding between periods, voice changes, low sex drive, reduced breast size, headaches, depression, and tiredness.

You need a prescription for gestrinone. It comes as capsules and the brand name is Dimetriose. It is not used much for breast pain in the UK. You should not take gestrinone if you are pregnant. You should also avoid becoming pregnant when using this treatment. However, you should not use the contraceptive pill or any other type of contraception that uses hormones. You can discuss options with your doctor.

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**Goserelin**

In this section

Goserelin (brand name Zoladex) is a type of hormone treatment. It is given as an injection. You'll usually be offered this treatment only if you get severe breast pain and other treatments haven't helped.

One small study (a randomised controlled trial) found that goserelin helped reduce the number of days that women reported severe pain in their breasts during their menstrual cycle. On average, women had six days of pain after they had treatment, compared with 17 days before they had treatment.

But this treatment can have side effects that you may not be able to put up with. The main ones are hot flushes, low sex drive, vaginal dryness, irritability, oily hair or skin, and reduced breast size. You should not take goserelin if you are pregnant. You should also avoid becoming pregnant when using this treatment. However, you should not use...
the contraceptive pill or any other type of contraception that uses hormones. You can discuss options with your doctor.

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**Tamoxifen**

In this section

Three studies (randomised controlled trials) have found that tamoxifen can help to reduce breast pain.\[19\] \[24\] \[25\] Tamoxifen (brand names Nolvadex, Nolvadex-D, Soltamox) is not licensed for treating breast pain in the UK. This doesn't mean it can’t be used for breast pain. But only a specialist can prescribe tamoxifen, and then for no more than six months.

Tamoxifen can cause hot flushes and vaginal discharge.\[19\] \[25\] But these can be reduced with a lower dose.\[26\]

You must not take tamoxifen if you are pregnant or likely to become pregnant. Tamoxifen can harm the unborn baby. If you are taking tamoxifen, you need to use a non-hormonal method of contraception (for example, an IUD or condoms).\[21\]

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**Progestogens**

In this section

There are many different progestogens, including progesterone, dydrogesterone, and medroxyprogesterone. Two small studies found that progestogens do not help breast pain.\[27\] \[28\]

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**Antibiotics**

In this section

There hasn't been any good-quality research on antibiotics for breast pain. So we can't say whether this treatment is helpful. But antibiotics are unlikely to help unless your breast is infected. Your doctor should check for infection before considering this treatment for breast pain.

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**Low-fat, high-carbohydrate diet**

In this section

One small study found that women who followed a low-fat, high-carbohydrate diet for six months reported less breast swelling and tenderness before their period.\[29\] But doctors couldn't find a difference in swelling and tenderness when they examined the women. We need more research to say whether following this diet is helpful.
Diuretics

In this section

There hasn't been any good-quality research on diuretics for breast pain. Diuretics help to get rid of excess water from the body, so some doctors think they could help to reduce breast pain linked with periods. But research shows that there's no link between breast pain and the amount of water retained in the body, so these medicines are unlikely to help.

Vitamin B-6

In this section

Vitamin B-6 is also called pyridoxine. There hasn't been any good-quality research on whether vitamin B-6 helps breast pain. There are concerns that taking vitamin B-6 for a long time could be harmful. [30]

Tibolone

In this section

One small study of women who had breast pain because of hormone replacement therapy (HRT) found that tibolone (brand name Livial) didn't help reduce breast pain. [31]

Vitamin E

In this section

There hasn't been any good-quality research on vitamin E for breast pain. So we can't say whether vitamin E is helpful.

Hormone replacement therapy (oestrogen)

In this section

There hasn't been any good-quality research on whether hormone replacement therapy (HRT) helps breast pain. But we do know that HRT can increase your chances of breast cancer, blood clots, and gall bladder disease if you are past the menopause.

Bromocriptine

In this section

Bromocriptine seems to relieve breast pain. [32] [33] But it is rarely prescribed, because it causes side effects that many women cannot put up with, including nausea, dizziness, and constipation.
Evening primrose oil

In this section

One study found that evening primrose oil does not help breast pain. Evening primrose oil is not available on prescription in the UK.

NSAID tablets

In this section

NSAIDs (short for nonsteroidal anti-inflammatory drugs) are a type of painkiller. You can take them as capsules or tablets. But there hasn't been much research to show whether they help women with breast pain.

Ibuprofen is a well-known NSAID. But the only study we found looking at NSAIDs for breast pain looked at a drug called nimesulide. Nimesulide isn't available in the UK.

The study of nimesulide found that more women had pain relief with the drug than with a dummy treatment (a placebo). But the study was small, and we need more research to confirm the results.

You can get stomach pains and diarrhoea if you take NSAID tablets. And they can cause stomach ulcers.

Taking high doses of some NSAIDs every day for a long time can increase your risk of a heart attack or stroke. This is less likely to be a problem if you take NSAIDs for a short time to treat pain.

Nimesulide is linked to a risk of serious liver damage, but it isn't used in the UK.

Further informations:

Glossary:

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>hormones</td>
<td>Hormones are chemicals that are made in certain parts of the body. They travel through the bloodstream and have an effect on other parts of the body. For example, the female sex hormone oestrogen is made in a woman's ovaries. Oestrogen has many different effects on a woman's body. It makes the breasts grow at puberty and helps control periods. It is also needed to get pregnant.</td>
</tr>
<tr>
<td>menstrual cycle</td>
<td>The menstrual cycle is the regular monthly process that causes an egg to be released from the ovaries so that a woman can get pregnant. The menstrual cycle causes her period, the bleeding that happens if she does not get pregnant.</td>
</tr>
<tr>
<td>mammogram</td>
<td>A mammogram is a special kind of X-ray picture of the breast. It is used to screen women for breast cancer, as well as to investigate breast lumps.</td>
</tr>
<tr>
<td>X-ray</td>
<td>X-rays are pictures taken of the inside of your body. They are made by passing small amounts of radiation through your body and then onto film.</td>
</tr>
<tr>
<td>cysts</td>
<td></td>
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</tbody>
</table>
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A cyst is a sac or cavity that develops under your skin and is filled with fluid. Cysts are benign, which means that they are not cancerous.

**Inflammation**

Inflammation is when your skin or some other part of your body becomes red, swollen, hot, and sore. Inflammation happens because your body is trying to protect you from germs, from something that's in your body and could harm you (like a splinter) or from things that cause allergies (these things are called allergens). Inflammation is one of the ways in which your body heals an infection or an injury.

**Arthritis**

Arthritis is when your joints become inflamed, making them stiff and painful. There are different kinds of arthritis. Osteoarthritis is the most common type. It happens when the cartilage at the end of your bones becomes damaged and then starts to grow abnormally. Rheumatoid arthritis happens because your immune system attacks the lining of your joints.

**Menopause**

When a woman stops having periods, it is called the menopause. This usually happens around the age of 50.

**NSAIDs**

NSAID stands for nonsteroidal anti-inflammatory drug. NSAIDs help with pain, inflammation and fever. They are called 'nonsteroidal' because they don't contain any steroids. Aspirin and ibuprofen are both NSAIDs.

**Randomised controlled trials**

Randomised controlled trials are medical studies designed to test whether a treatment works. Patients are split into groups. One group is given the treatment being tested (for example, an antidepressant drug) while another group (called the comparison or control group) is given an alternative treatment. This could be a different type of drug or a dummy treatment (a placebo). Researchers then compare the effects of the different treatments.

**Intrauterine device (IUD)**

An intrauterine device (IUD) is a type of contraceptive. It is a small device made of copper or plastic, with threads at the end. These threads can be left in your vagina while the rest of the device sits in your womb (cervix). IUDs stop eggs sticking to your womb and growing.

**Antibiotics**

These medicines are used to help your immune system fight infection. There are a number of different types of antibiotics that work in different ways to get rid of bacteria, parasites, and other infectious agents. Antibiotics do not work against viruses.

**Diuretics**

Diuretics are a type of medicine that reduce the amount of fluid in your body. The extra fluid is removed in your urine.

**Hormone replacement therapy**

Hormone replacement therapy (also called HRT) is given to women after the menopause to replace the oestrogen (the main female hormone) that is no longer made by their ovaries. It can be given either as oestrogen alone or as a combination of oestrogen and progesterone (another female hormone). It is useful to treat menopausal symptoms such as hot flushes, and to prevent brittle bone disease (osteoporosis). But there are concerns that it may increase the risk of breast cancer, heart attacks and strokes.

**Placebo**

A placebo is a 'pretend' or dummy treatment that contains no active substances. A placebo is often given to half the people taking part in medical research trials, for comparison with the 'real' treatment. It is made to look and taste identical to the drug treatment being tested, so that people in the studies do not know if they are getting the placebo or the 'real' treatment. Researchers often talk about the 'placebo effect'. This is where patients feel better after having a placebo treatment because they expect to feel better. Tests may indicate that they actually are better. In the same way, people can also get side effects after having a placebo treatment. Drug treatments can also have a 'placebo effect'. This is why, to get a true picture of how well a drug works, it is important to compare it against a placebo treatment.

Sources for the information on this leaflet:


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