Breast pain

Overview

Breast pain (mastalgia) can be described as tenderness, throbbing, sharp, stabbing, burning pain or tightness in the breast tissue. The pain may be constant or it may occur only occasionally, and it can occur in men, women and transgender people.

Breast pain can range from mild to severe. It may occur:

- Just a few days a month, in the two to three days leading up to a menstrual period. This normal, mild-to-moderate pain affects both breasts.
- A week or longer each month, starting before a period and sometimes continuing through the menstrual cycle. The pain may be moderate or severe, and affects both breasts.
- Throughout the month, not related to a menstrual cycle.

In men, breast pain is most commonly caused by a condition called "gynecomastia" (guy-nuh-koh-MAS-tee-uh). This refers to an increase in the amount of breast gland tissue that's caused by an imbalance of the hormones estrogen and testosterone. Gynecomastia can affect one or both breasts, sometimes unevenly.

In transgender women, hormone therapy may cause breast pain. In transgender men, breast pain may be caused by the minimal amount of breast tissue that may remain after a mastectomy.

Most times, breast pain signals a noncancerous (benign) breast condition and rarely indicates breast cancer. Unexplained breast pain that doesn't go away after one or two menstrual cycles, or that persists after menopause, or breast pain that doesn't seem to be related to hormone changes needs to be evaluated.

Symptoms

Breast pain can be cyclic or noncyclic. Cyclic means that the pain occurs on a regular pattern. Noncyclic means that the pain is constant, or that there's not a regular pattern. Each type of breast pain has distinct characteristics.

Breast pain characteristics

Cyclic breast pain

Clearly related to the menstrual cycle and changing hormone levels

- Described as dull, heavy or aching
- Often accompanied by breast swelling, fullness or lumpiness
- Usually affects both breasts, particularly the upper, outer portions, and can radiate to the underarm
- Intensifies during the two weeks leading up to the start of the menstrual period, then eases up afterward
- More likely to affect people in their 20s and 30s, as well as people in their 40s who are transitioning to menopause

Noncyclic breast pain

- Unrelated to the menstrual cycle
- Described as tight, burning, stabbing or aching sensation
- Constant or intermittent
- Usually affects one breast, in a localized area, but may spread more diffusely across the breast
- In women, most likely to occur after menopause

Extramammary breast pain

The term "extramammary" means "outside the breast." Extramammary breast pain feels like it starts in the breast tissue, but its source is actually outside the breast area. Pulling a muscle in the chest, for example, can cause pain in the chest wall or rib cage that

spreads (radiates) to the breast. Arthritis that involves the cartilage in the chest, also known as costochondritis, can also cause pain.

When to see a doctor

Make an appointment with your doctor if breast pain:

- Continues daily for more than a couple of weeks
- Occurs in one specific area of your breast
- Seems to be getting worse over time
- Interferes with daily activities
- Awakens you from sleep

Breast cancer risk is very low in people whose main symptom is breast pain, but if your doctor recommends an evaluation, it's important to follow through.

Causes

Changing hormone levels can cause changes in the milk ducts or milk glands. These changes in the ducts and glands can cause breast cysts, which can be painful and are a common cause of cyclic breast pain. Noncyclic breast pain may be caused by trauma, prior breast surgery or other factors.

Sometimes, it's not possible to identify the exact cause of breast pain, but some factors may increase the risk.

Risk factors

Breast pain is more common among people who haven't completed menopause, although it may occur after menopause. Breast pain can also occur in men who have gynecomastia, and in transgender people who are undergoing gender reassignment.

Other factors that may increase the risk of breast pain include:

- Breast size. People who have large breasts may experience noncyclic breast pain related to the size of their breasts. Neck, shoulder and back pain may accompany breast pain that's caused by large breasts.
- Breast surgery. Breast pain associated with breast surgery and scar formation can sometimes linger after incisions have healed.
- **Fatty acid imbalance.** An imbalance of fatty acids within the cells may affect the sensitivity of breast tissue to circulating hormones.
- Medication use. Certain hormonal medications, including some infertility treatments and oral birth control pills, may be associated with breast pain. Breast tenderness is a possible side effect of estrogen and progesterone hormone therapies that are used after menopause. Breast pain may be associated with certain antidepressants, including selective serotonin reuptake inhibitor (SSRI) antidepressants. Other medicines that can cause breast pain include those used to treat high blood pressure and some antibiotics.
- Excessive caffeine use. Although more research is needed, some people notice an improvement in breast pain when they reduce or eliminate caffeine.

Prevention

The following steps may help prevent the causes of breast pain, although more research is needed to determine their effectiveness.

- Avoid hormone therapy if possible.
- Avoid medications that are known to cause breast pain or make it worse.
- Wear a properly fitted bra, and wear a sports bra during exercise.
- Try relaxation therapy, which can help control the high levels of anxiety associated with severe breast pain.
- **Limit or eliminate caffeine**, a dietary change some people find helpful, although studies of caffeine's effect on breast pain and other premenstrual symptoms have been inconclusive.
- Avoid excessive or prolonged lifting activities.

- Follow a low-fat diet and eat more complex carbohydrates.
- Consider using an over-the-counter pain reliever, such as acetaminophen (Tylenol, others) or ibuprofen (Advil, Motrin IB, others) but ask your doctor how much to take, as long-term use may increase your risk of liver problems and other side effects.

Diagnosis

Tests to evaluate your condition may include:

- Clinical breast exam. Your doctor checks for changes in your breasts,
 examining your breasts and the lymph nodes in your lower neck and
 underarm. Your doctor will likely listen to your heart and lungs and check
 your chest and abdomen to determine whether the pain could be related to
 another condition. If your medical history and the breast and physical exam
 reveal nothing unusual, you may not need additional tests.
- Mammogram. If your doctor feels a breast lump or unusual thickening, or detects a focused area of pain in your breast tissue, you'll need an X-ray exam of your breast that evaluates the area of concern found during the breast exam (diagnostic mammogram).
- Ultrasound. An ultrasound exam uses sound waves to produce images of your breasts, and it's often done along with a mammogram. You might need an ultrasound to evaluate a focused area of pain even if the mammogram appears normal.
- Breast biopsy. Suspicious breast lumps, areas of thickening or unusual areas seen during imaging exams may require a biopsy before your doctor can make a diagnosis. During a biopsy, your doctor obtains a small sample of breast tissue from the area in question and sends it for lab analysis.

Treatment

For many people, breast pain resolves on its own over time. You may not need any treatment.

If you do need help managing your pain or if you need treatment, your doctor might recommend that you:

- Eliminate an underlying cause or aggravating factor. This may involve a simple adjustment, such as wearing a bra with extra support.
- Use a topical nonsteroidal anti-inflammatory (NSAID) medication. You
 may need to use NSAIDs when your pain is intense. Your doctor may
 recommend that you apply an NSAID cream directly to the area where you
 feel pain.
- Adjust birth control pills. If you take birth control pills, skipping the pill-free
 week or switching birth control methods may help breast pain symptoms.
 But don't try this without your doctor's advice.
- Reduce the dose of menopausal hormone therapy. You might consider lowering the dose of menopausal hormone therapy or stopping it entirely.
- Take a prescription medication. Danazol is the only prescription medication approved by the Food and Drug Administration for treating fibrocystic breasts. However, danazol carries the risk of potentially severe side effects, such as heart and liver problems, as well as weight gain and voice changes. Tamoxifen, a prescription medication for breast cancer treatment and prevention, may help, but this drug also carries the potential for side effects that may be more bothersome than the breast pain itself.

Alternative medicine

Vitamins and dietary supplements may lessen breast pain symptoms and severity for some people. Ask your doctor if one of these might help you — and ask about doses and any possible side effects:

- Evening primrose oil. This supplement may change the balance of fatty acids in your cells, which may reduce breast pain.
- **Vitamin E.** Early studies showed a possible beneficial effect of vitamin E on breast pain in premenstrual women who experience breast pain that fluctuates during the menstrual cycle. In one study, 200 international units

(IU) of vitamin E taken twice daily for two months improved symptoms in women with cyclic breast pain. There was no additional benefit after four months.

For adults older than 18 years, pregnant people and breastfeeding women, the maximum dose of vitamin E is 1,000 milligrams daily (or 1,500 IU).

If you try a supplement for breast pain, stop taking it if you don't notice any improvement in your breast pain after a few months. Try just one supplement at a time so that you can clearly determine which one helps alleviate the pain — or not.

Preparing for your appointment

If you have breast pain that is new, that persistently affects just a particular part of your breast or that affects your quality of life, see your doctor for an evaluation. In some cases, when you call to set up an appointment, you may be referred immediately to a breast health specialist.

Preparing for an appointment

The initial evaluation of your breast pain focuses on your medical history. Your doctor will ask about the location of your breast pain, its relation to your menstrual cycle and other relevant aspects of your medical history that might explain the cause of your pain. To prepare for this discussion:

- **Keep a journal,** noting when you experience breast pain and other symptoms, to determine whether your pain is cyclic or noncyclic.
- Take note of all your symptoms, even if they seem unrelated to your breast pain.
- Rate your pain on a scale of 1 to 10, with 1 being no pain and 10 being the worst pain imaginable.
- Review key personal information, including major stresses or recent life changes.
- List all the medications, vitamins and supplements that you regularly take.
- List questions to ask your doctor, from most important to least important.

For breast pain, basic questions to ask your doctor include:

- What is the most likely cause of my symptoms?
- What kinds of tests might I need?
- What treatment approach do you recommend for my condition?
- Are there any home remedies I might try?

What to expect from your doctor

Your doctor may ask you questions such as:

- Where in your breast do you feel pain?
- How long have you had breast pain?
- On a 10-point scale, how severe is your pain?
- Do you have pain in one or both breasts?
- Does the pain seem to occur in any sort of pattern?
- Have you ever had a mammogram? When was your last one?
- Do you have any other signs or symptoms, such as a breast lump, area of thickening or nipple discharge?
- Have you noticed any skin changes, such as redness or a rash?
- Have you recently had a baby? Or have you experienced a pregnancy loss or termination?
- How does the pain impact your quality of life, for instance sleep, sexual activity or work? Does your pain make you less able to perform daily activities?
- Have you been involved in any activities or had a recent injury to your chest that may contribute to your breast pain?

Your doctor may also assess your personal risk of breast cancer, based on factors such as your age, family medical history and prior history of precancerous breast lesions.

SOURCE: <u>Breast pain - Symptoms and causes - Mayo Clinic</u>; <u>Breast pain - Diagnosis and treatment - Mayo Clinic</u>