



ST. VINCENT'S BREAST HEALTH CENTER

St. Vincent's HealthCare

St. Vincent's Breast Health Center
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Breast Pain

Definition of terms:

Abscess— A collection of pus from an infection

Antibiotic— A medicine used to destroy bacteria in the body

Cyclic— Occurs in cycles; fluctuates during the menstrual cycle

Cyst— A fluid-filled sac

Duct Ectasia— Ducts of the breast filled with cellular material, creating tenderness and discharge that may or may not be infected with bacteria

Hormones— Chemicals made by the body that affect function of cells. The most common female hormones are estrogen, progesterone and prolactin

Fibroadenoma— Benign fibrous tumor

Mastalgia— Pain in the breast

Mastitis— Pain and tenderness of the breast; caused by inflammation

Mastodynia— Pain in the breast

Musculoskeletal— Pertaining to the muscles and bones of the body

Noncyclic— Does not occur in cycles

Ovulation— Middle of menstrual cycle when egg is released

Pain in the breast is referred to as mastalgia or mastodynia. Pain may be characterized as cyclic or noncyclic. A healthcare provider's examination and a mammogram can most often determine the cause of the pain. Breast pain may be uncomfortable and annoying, but it is usually not unbearable. What seems unbearable is the fear that it may be cancer. In studies of women diagnosed with breast cancer less than 10 percent had any pain involved. Pain with breast cancer is not common. Most pain is due to hormonal or benign breast conditions. However, all breast pain needs evaluation to determine its cause. To assist your physician, it will be helpful if you understand the different kinds and characteristics of breast pain.

Cyclic pain appears to be related to the female hormones estrogen, progesterone and prolactin. Their effect on breast tissue varies at different times of the monthly and life cycles. Pain related to hormonal changes usually begins at ovulation and increases until the menstrual period begins. After menstruation, the pain decreases. Both breasts are usually involved, but occasionally, one breast will experience a greater degree of pain. Often, the pain is greatest in the upper-outer quadrants (from the nipple back toward the armpit) and sometimes radiates to the armpit and arm. The discomfort is felt throughout the area and is often described as a dull, aching pain, as if the breast were filled with milk. Pre-menopausal women experience this pain. Menopause relieves the symptoms unless a woman takes hormone replacement therapy.

Pain and the Drug Connection

The most common causes and promoters of breast pain are prescription medications, over-the-counter medications, and herbal products. These can greatly increase cyclic pain and be mistaken for breast disease. Because drugs can produce different responses in different women, some may experience breast pain as a side effect while others may not. The most common drug categories are hormonal, blood pressure, heart, pain relievers, antidepressants, and gastrointestinal medications. Additionally, some herbal products can cause breast pain such as Ginseng or Dong Quai (recommended for premenstrual syndrome and menopausal side effects). Ma Huang (Ephedra Sinica or Chinese Ephedra) is a botanical source of ephedrine and pseudoephedrine that is found in many weight loss products and will cause breast tenderness and pain. Guarana or kola nut, found in many energy and weight control products, is actually a type of caffeine. A complete list of over 400 drugs with known side effects of promoting breast pain are listed in *Solving the Mystery of Breast Pain*, from EduCare Inc.

Do not stop any prescription drug without consulting your healthcare provider. Instead, bring to their attention the drug you are taking and the potential relationship to promoting your pain. If you are taking over-the-counter herbal supplements, you can stop them for several weeks to see if they are causing your breast pain.

Cyclic Pain Interventions

The first intervention should be wearing a well-fitting bra that holds your breast to the chest wall. Sleeping in a sports bra is also helpful. This keeps the breasts from moving freely and decreases pain.

Dietary changes have also helped some women. Refraining from or greatly reducing the amount of caffeine (coffee, tea, colas, chocolate) consumed and eating a low-salt diet may provide relief for some women. Supplements, including vitamin E and B-complex, are occasionally recommended by physicians as helpful. Ask your healthcare provider for recommendations in dietary changes and supplements.

Drug Therapy for Cyclic Pain

For some women, low-dose birth control pills may relieve cyclic pain. Birth control pills cause the hormones in the body to remain more consistent and balanced by reducing wide hormonal fluctuations some women experience. However, birth control pills may stimulate breast pain for some women. If pain starts after birth control pills are prescribed and continues for several months, inform your healthcare provider. The dosage may need to be changed.

Danazol®, a male hormone drug, may be prescribed for highly painful mastalgia not relieved by other methods of treatment. It is effective in altering the balance of female hormones. Some women avoid taking the drug because it is expensive and because it can cause unwanted masculine side effects, such as the growth of facial hair.

Bromocriptine, a drug that blocks the hormone prolactin (stimulates breast milk production), may also reduce breast pain. Progesterone, one of the major premenopausal female hormones, is also being used to reduce pain. When estrogen levels are too high and out of balance with progesterone (called estrogen dominance), pain may occur. Progesterone cream, sublingual lozenge (under the tongue), or pills can correct the deficiency in progesterone. Natural progesterone prepared by a compounding pharmacist appears to be the most effective. Many women report reduction in breast pain with progesterone.

Noncyclic Pain

Noncyclic pain differs from cyclic pain in that it has no relationship to the menstrual cycle and the changes in hormonal levels during the month. This pain can be continuous or may only occur from time to time. The pain is usually localized to a specific area in one breast (unilateral). It is often described as a sharp, stabbing, or burning sensation in the breast. This pain has been linked to fluid-filled cysts, fibroadenomas, duct ectasia, mastitis, injury, and breast abscesses. Treatment may include withdrawing the cyst fluid, surgically removing the fibroadenoma, prescribing antibiotics for duct ectasia, mastitis or abscesses.

Some noncyclic pain is also related to musculoskeletal causes. The most common is pain that comes from a pinched nerve in the back or cervical (neck) region causing radiculitis (inflammation with pain). Often, a history of back injury, scoliosis, arthritis, or osteoporosis is involved. The pain radiates to one breast, causing pain.

If the second intercostal nerve is involved, the pain and tenderness will appear in the upper, outer breast, under the arm and will extend down the arm often causing numbness and tingling of the fingers. If the pressure is coming from the third nerve in this area, there will be pain and tenderness along the nipple line.

To check for this pain, a healthcare provider will ask the patient to elevate her arm on the painful side over her head. The physician, standing behind the patient, lifts the painful breast toward her breastbone and applies pressure in the mid-underarm area. If the pain is coming from a pinched nerve, this will cause a very tender area(s) to radiate pain into the breast. Pressure applied to the mid-axillary line causes pain.

Another cause of breast pain originates in the area of the breastbone and ribs and is known as Tietze's syndrome. It is commonly called painful costochondritis (inflammation of the cartilage of the ribs). This pain is localized in the medial half (closest to breastbone) and is tender when pressure is placed on the breastbone, when the rib cage is moved, or when a deep breath is taken. This pain often occurs after doing heavy lifting or activities that stretch the upper body. If the pain is from costochondritis, ibuprofen or aspirin taken for several days on a regular basis will usually reduce the pain.

Other causes for breast pain may be from phlebitis (an inflamed vein), called Mondor's syndrome. Even infected teeth have been shown to cause referred breast pain.

Identifying Your Pain

If you cannot determine if your pain is cyclic or noncyclic, keep a record of the pain you experience daily and its time in your cycle. After two months, your healthcare provider will be able to tell if the pain is associated with the fluctuating hormones of your menstrual cycle or bears no relationship to hormonal changes and is possibly coming from breast disease or conditions.

Cyclic pain has no relation to cancer and non-cyclic pain is rarely a sign of cancer. However, all pain should be checked out. Most often, breast cancer pain is localized in the breast (one place hurts), continuous (not changing with different times in the menstrual cycle), and usually occurs in only one breast.

If you have breast pain, schedule a breast exam with a healthcare provider. It is important to inform your healthcare provider of any new prescription or over-the-counter medications you are taking, including herbal supplements. After a complete history and breast exam, a mammogram will probably be ordered (if over 35) to search for any cause not apparent on the exam. Following mammography, an ultrasound may or may not be needed. If the exam and the imaging procedures are negative (no suspicious findings), a search to determine what type

of pain and how to relieve your pain should be started. If an area or concern is found during testing, a biopsy may be needed to determine the cause or to rule out cancer.

The majority of breast pain is not related to cancer, but all pain needs a thorough evaluation by a healthcare provider.

Comparison of Cyclic, Non Cyclic and Musculoskeletal Pain

Feature	Cyclic	Non Cyclic	Musculoskeletal
Age of Onset	30's	30 - 40's	Any Age
Location	Bilateral Upper Outer Area	Unilateral One Area	Usually Unilateral Near Breastbone
Area	Spread Out	One Spot	Different Parts of Breast
Type of Pain	Dull, Aching	Sharp, Stabbing	Burning, Aching
Status	Pre-Menopausal	Pre/Post Menopausal	Any Age
Hormone Therapy	Responds Well	Minimal Response	No Response
Ibuprofen/Aspirin	Some Help	Some Help	Very Helpful