



Common Breast Problems:

Breast Pain

Breast pain is the most common symptom that brings women to their physician. In general, there are two common presentations of breast pain: cyclic and non-cyclic. Breast pain is especially common in younger, pre-menopausal women. Approximately 10% of the women who see their health care provider for breast pain describe it as being severe. Fortunately, the vast majority of patients with breast pain do not have breast cancer.

Cyclic breast pain occurring in both breasts a few days before the onset of menstruation is normal. At times, the pain can become more severe and extend through the entire menstrual cycle. Although there are some simple treatments that are helpful for many women, cyclic breast pain becomes a major problem. Fortunately, for the vast majority of these women, the pain seems to improve with time, no matter what the treatment.

If the pain is in both breasts and there are no other symptoms (such as a lump, spontaneous nipple discharge, or color changes in the breast and/or nipple), a woman can be reassured that the chances of cancer are extremely small. However, if the pain persists for more than two months or seems to be getting progressively worse, medical consultation is indicated.

With non-cyclic breast pain, women commonly experience pain in one breast that seems unrelated to the menstrual cycle, and is not related to other obvious causes, such as trauma or pregnancy. The pains can occur anywhere in either breast, but often start in the nipple and radiate to the armpit. Many times these pains seem to occur in "jolts" that last only a few seconds. Such pains are quite common, and are probably of neurogenic origin. In our experience, this type of pain is rarely, if ever, associated with cancer. This type of jolting pain does not respond well to treatment, but it usually resolves on its own. If pain persists more than two months, medical attention is indicated.

Other breast pains are more focal and persistent. If the pain is aggravated by movement, it is probably of musculoskeletal origin and treatment with over-the-counter analgesics is indicated. Again, if the pain persists for more than two months, medical attention is indicated.

Of course, the concern of any woman with breast pains is the possibility that the pain is related to breast cancer. In the vast majority of cases, breast cancer is not associated with breast pain. In most cases in which breast cancer is

associated with pain, the cancer is easily diagnosed on examination or on standard breast imaging, such as a mammogram or ultra-sound.

There are, however, rare cases in which breast pain is the first symptom of a breast cancer, and the physical examination and initial imaging studies (including ultrasound) are normal. In my experience, there are some clues in the pattern of breast cancer-related pain that should lead the physician to be suspicious that a cancer might be the cause. The pains associated with an occult cancer (i.e. not obvious on imaging or on physical examination) tend to be focal, i.e. in one spot in the breast. The pain also tends to get steadily worse over time.

When a patient tells me that that she has a focal pain that seems to be getting worse, I am immediately suspicious of an underlying cancer, although in most cases it will prove not to be the case. Even if the breast is normal to my examination, I order a diagnostic mammogram, which includes additional views (including magnification views and a diagnostic ultrasound). If the work-up is negative, I usually have the patient return in 4-8 weeks, and have her return immediately if there are new components to the pain. If on the return visit the pain has not improved, the next step is an MRI. If the MRI is negative, we are almost certain that the pain is not due to cancer, but we continue to follow the patient clinically. In rare cases, we will biopsy an area of focal pain in the absence of any detectable abnormalities. This decision should be made by an experienced breast surgeon and with full understanding by the patient.

Treatment of Breast Pain:

- Caffeine restriction:

Caffeine restriction can result in dramatic reductions in cyclic breast pain in some women, especially those who drink multiple cups of coffee per day. Women with low-to-moderate intake of caffeine have a less predictable response to restriction of caffeine intake. We advise all women with cyclic breast pain to reduce or eliminate caffeine, and the majority of patients seem to experience at least partial relief of symptoms. Caffeine is also found in tea, most soft drinks, and in chocolate. There is no known relationship between caffeine intake and an increased breast cancer risk.

- Evening Primrose oil (EPO):

We have had patients who have reported dramatic benefits with EPO, and others who had no benefit. EPO comes in a capsule that is taken by mouth, and is available in most health food stores. We recommend that a patient start with 1500 mg twice a day for at least two weeks. If there is improvement in pain, this dosing is continued for at least 3 months to assess its effect over successive menstrual cycles, and can be continued as needed for symptomatic relief. If no benefit is obtained, EPO can be discontinued.

- Vitamin E and other “anti oxidants”
Vitamin E, as well as many of the B vitamins, have been credited with providing relief for breast pain, but the data to support the effectiveness of their use in women with breast pain is limited.

- Estrogen and Breast Pain:

One of the most common side effects of estrogen is breast pain, and one of the most common causes of breast pain in post-menopausal women is the estrogen component in hormone replacement therapy. We recommend that all post-menopausal women on estrogen take the lowest dose that will control menopausal symptoms. Breast pain secondary to estrogen intake is just one more good reason to keep estrogen doses as low as tolerable.

Fortunately, birth control pills are not typically associated with breast pain, and sometime breast pain is reduced with the use of oral contraceptives.

- Diet and Breast Pain:

There is limited evidence that a low-fat diet may have some benefit on breast pain. We still recommend a low-fat diet, since it may help in lowering breast cancer risks, and it is definitely of value in lowering cardiac risks and the risk of other types of cancer such as colon cancer.

- Breast Support:

A well-fitted bra is often of value in reducing breast pain. It is of important to get a good fit, and every woman seems to have her own favorite type of fit. There are professional fitters who can be of assistance. In some cases, extra support can be obtained with an additional external wrap, such as with a circumferentially wrapped ace-bandage.

- Iodine Replacement

There are reports that iodine can reduce breast pain (Canadian J Surg. 1993;35:453-60). We have had patients who have reported on over-the-counter iodine-containing products which have effectively reduced breast pain, but I have been unable to confirm these reports, and do not have a specific product that I can recommend.

- Other products:

Bromocriptine (a medication which blocks the pituitary secretion of prolactin) and danazol (which blocks luteinizing and follicle-stimulating hormones) are often mentioned as agents that can be used for severe breast pain. The side-effects of both drugs are significant, and in our experience that when these side effects are discussed with patients, they have all elected not to take the drugs. Diuretics have also been advised in the past, but we do not recommend them for breast pain.

Over-the-counter analgesics such as Tylenol, aspirin, and non-steroidal anti-inflammatories (i.e. Advil, Motrin) are often quite effective for short-term pain relief.

- Surgery:

In the past, subcutaneous mastectomy was used as a treatment for extreme breast pain that was not responsive to standard treatments. We have not done this operation for decades, and believe that patients with breast pain can be handled with less invasive forms of treatment.

Breast Lumps

Overview:

Evaluation of a new breast lump is one of the greatest challenges physicians face in caring for women with breast concerns. Breasts are by nature lumpy, and this lumpiness is accentuated with hormonal stimulation, as occurs with the menstrual cycle and with hormone replacement therapy.

Most lumps are not cancer, but if a lump is a cancer, it is imperative to make the diagnosis as soon as possible. Thus, when it comes to lumps, physicians have a dual challenge: First, to diagnose cancer early; and second, to reassure the patient when the lump is benign.

Fortunately, the vast majority of breast lumps will prove not to be cancer. The vast majority of lumps that prove to be cancer are first detected by the women (90%).

Unfortunately, however, the majority of breast cancers that are first found by the women are found incidentally, or “by accident”. A typical story would be that the woman receives minor trauma to the chest, and in checking herself she finds a breast lump. Lumps that are found “by accident” tend to be large, and usually require aggressive treatment.

A new trend seems to be emerging. Recently we have been seeing a growing number of women finding small lumps on breast self-examination. These small lumps found on self-examination typically have an excellent prognosis. The women who tended to find these potentially curable breast cancers on self-examination had become proficient in BSE, and had made the long-term commitment to do a careful monthly self-examination.

We have seen numerous examples in which a woman doing BSE with confidence and found a subtle change six months after a normal clinical breast examination was performed. When a woman notes a subtle change on BSE it should be reported to her health care provider. It often the case that these subtle changes are not appreciated by the health care provider, but it essential that these changes be taken seriously. This typically includes special mammographic views and a directed ultra-sound examination.

If the examination and imaging studies are negative, then careful follow is indicated. If the lump persists for more that two months, tissue sampling is indicated. It is this aggressive approach to subtle changes in the breast that give women the best potential for diagnosing a cancer when it is at an early stage and potentially curable and aggressive chemotherapy can often be avoided.

Thus, despite the current controversy about the benefits of BSE, we are convinced that when taught properly, it can be life saving. When done right, BSE provides a woman with one more layer of protection in avoiding a delay in diagnosis of breast cancer. We find that when women make the commitment to learn BSE, they typically experience that they are in control of their breast health. This leads to improved self-confidence and a sense of empowerment.

Types of Breast Lumps:

Fibrocystic Condition:

Women commonly tell us that that they have fibrocystic breasts, when in fact they just have normal breasts. The glandular tissue in the breast (the milk producing portions) are sensitive to hormonal stimulation. Menstruating women typically note that both breasts feel engorged, swollen, and tender just before the

onset of the menstrual period, when the hormone levels are highest.

Oftentimes, as part of this cyclic-hormonal process, a lump will form that can be readily distinguished from the surrounding breast tissue. These lumps are typically of two types: cystic (fluid-filled), or solid. Both types are completely benign and are not associated with a future increased risk of breast cancer.

Breast cysts:

Cysts are fluid-filled capsules in the breast that can vary in size from microscopic to more than an inch in diameter. Most cysts do not cause symptoms, and can be ignored. For those cysts that do cause problems, the treatment of choice is aspiration. A small needle is inserted into the cyst and the fluid is suctioned out; in most cases, this fluid is discarded without further testing (unless there is evidence of gross blood or the cyst does not completely resolve with aspiration).

There are three indications for aspirating a cyst:

- when the cyst is associated with a palpable lump
- when the cyst causes focal pain
- When the cyst makes the interpretation of the mammogram more difficult. In these cases we aspirate the cyst and repeat the mammogram.

Cysts are usually aspirated using Ultra-sound guidance to insure complete removal of fluid which makes it less likely that they will return. If the cyst can not be completely aspirated or has any unusual characteristics it should undergo biopsy. If it is an uncomplicated cyst that goes away completely after aspiration the patient can be reassured that all is well, but a 2-3 month follow-up is indicated. If a cyst continues to recur following aspiration, consideration should be given for core or open biopsy.

Fibrocystic solid breast lumps:

Fibrocystic breast lumps are typically divided into two categories: cystic and solid. The cystic lumps are easily identified on ultrasound, and are easily treated with aspiration. The most common cause of both solid and cystic breast lumps is hormonal stimulation. Solid lumps caused by hormonal stimulation are called fibrocystic lumps. The name is confusing since these lumps tend to be solid, but on microscopic examination they do show microcystic changes related to hormonal stimulation.

In general, when a distinct lump in the breast is found, a tissue diagnosis must be made. Fortunately, fibrocystic breasts lumps are completely benign, and are not associated with any risk for the future development of breast cancer.

Fibroadenomas:

Fibroadenomas are the most common benign breast lumps found in women in their teens and 20's. They are typically firm, smooth, round and mobile. They usually are not tender. On ultrasound, they are typically oval, with smooth borders. Although the diagnosis is usually quite obvious on initial evaluation, we believe that tissue confirmation with either a core biopsy or surgical removal is indicated in most cases. If a diagnosis of a fibroadenoma can be established on a core biopsy, clinical observation is appropriate. However, if the fibroadenoma shows signs of progressive or rapid growth over time, it should be surgically removed.

Multiple fibroadenomas:

In approximately 10% of women who get fibroadenomas, they will occur in multiples within the breast. In some rare cases, a dozen or more can be detected on ultrasound in each breast. In general, our policy is to core biopsy the largest lesion(s) in each breast. If a diagnosis of fibroadenoma can be established, we simply follow the patient at regular intervals.

Cystosarcoma phylloides (CSP):

CSP is an unusual condition that usually presents and a hard, round mass which resembles a typical fibroadenoma. Rapid growth is one clinical clue that a lump that feels like a fibroadenoma is actually a CSP. Rapid growth is an indication for excisional biopsy . Usually, the diagnosis is first made on a core biopsy. This allows us to plan a surgery that will remove the lump, plus a surrounding margin of normal tissue.

When we remove what we think is a simple fibroadenoma and it actually proves to be a CSP, we usually go back and remove the surrounding tissue. If the clearance of surrounding tissue is done properly, later recurrence is very rare.

Other benign lumps:

There is a long list of condition in the breast that will cause a lump. In general, there are some simple rules that can be followed to make certain a lump is benign. The concern with any lump is that it may represent a

breast cancer. Any new lump requires an examination by an experienced healthcare provider who is familiar with breast health and anatomy. We always perform an ultrasound examination during the initial workup, and typically add a diagnostic mammogram in most cases (depending on the patient's age, status of the previous mammogram, and the level of our clinical suspicion).

The only way a lump can be definitively proved to be benign is by tissue sampling. In most cases, a simple core biopsy will establish a definitive diagnosis. In some cases, the tissue obtained on the core biopsy is insufficient to make a definitive diagnosis; thus, either a repeat core biopsy or (usually) open surgical removal of the lump is required.

If after complete assessment and adequate tissue sampling the lump is determined to be benign, only routine follow-up is indicated and the woman is at no increased risk for the future development of breast cancer. However, there are some benign lumps which signify an increased risk of developing future breast cancer, and more aggressive follow-up is indicated. These high-risk lesions will be discussed in the next section.

High risk lumps:

In the event that a breast biopsy demonstrates high-risk changes (i.e. atypical ductal hyperplasia, atypical lobular hyperplasia, lobular carcinoma in-situ, radial scar), the risk for the development of a future breast cancer is increased beyond normal. Such women should be followed more aggressively. Estrogen replacement or other hormone use should be avoided or minimized.

These women should be given the option of hormonal blockade with agents such as tamoxifen or Evista. Regular physical examination and BSE are important. In women with dense breast tissue, adjunct ultrasound and MRI screening (in addition to annual mammography) is indicated.

A family history of breast cancer increases the risk of future cancer in patients with atypia (the presence of atypical cells in a breast biopsy). Women with a strong family history should strongly consider hormonal blockade therapy, and in select circumstances they should also consider the option of prophylactic mastectomy.

Malignant breast lumps:

When a breast biopsy comes back as cancer, there is an urgent need for the doctor to meet face-to-face with the patient and provide a detailed explanation of the situation. It is important for the patient to realize that there is always hope. When breast cancer is caught early, there is a high probability for cure. However, even more advanced cancers can be highly responsive to modern therapy.