

PELVIC PAIN: AN OVERVIEW

Pain Is,

as Paul Brand wrote, the gift nobody wants. It is given to us to signal injury to the body and causes us to change our behavior in some way to avoid the danger. Unfortunately the physiological mechanisms which exist to keep us safe and healthy can backfire, causing us to do increasing damage to our bodies by responding to the pain. When human beings experience pain, signals are sent to very deep portions of the brain which also generate fear and anxiety. These emotions increase our sensation of pain and a release of stress hormones throughout the body. Women who have suffered sexual abuse, physical abuse or emotional abuse at any time in their lives are more susceptible to problems with pelvic pain. It may be that the body has a “physical memory” of the painful experience, and triggers such as a smell, a particular phrase, or even a holiday celebration can initiate an unconscious series of physical reactions. The reactions may be difficult to pinpoint, such as an increased sense of anxiety, or more specific, like increased muscle spasms and abdominal tension triggering severe pelvic pain. This, of course, is speculation. However, data are very clear in the medical literature on pelvic pain that women who have suffered from physical violence or emotional abuse make up as much as 60-75% of the patients we see with chronic pelvic pain.

There are two types of nerves in the body that can “feel” pain. They are the somatic nerves - those that supply the skin, muscles, and external parts of the body - and visceral nerves - those that supply our internal organs. These nerves respond to different types of signals. For example, the visceral nerves cannot feel temperature. The somatic nerves are very specific in their locations while the visceral nerves are like a spider web within our organs - the same nerves supplying multiple structures.

Pelvic pain can arise from either the somatic nerves supplying the skin, muscles and outer “housing” of the pelvis, or from visceral nerves supplying the uterus, tubes, ovaries, bladder, intestines and blood vessels in the pelvis. Most women and many physicians tend to discount the abdominal wall and the pelvic floor musculature as a source of pelvic pain; however these components are a significant source of pain in many people. It is important to carefully address ALL potential sources of pain when evaluating women for pelvic pain.

Pain in the pelvis can be acute - that is rapid in onset and severe in quality, or chronic - a sensation that has been present for longer than 3-6 months. Acute pain often signals an urgent medical condition such as pelvic infection, appendicitis, or an abnormal pregnancy. Acute pain that lasts more than a few hours requires immediate medical attention. Chronic pain, on the other hand, may well have begun with an insult to the body causing a series of responses that are now responsible for the chronic discomfort. It may be easier to understand an example from orthopedics. If I injure my right knee skiing, I will automatically adjust the way I walk and carry my body to protect that knee. In a few weeks my knee may have healed, however I will often continue to walk with an unbalanced gait since I’ve become accustomed to it and in several months I may develop chronic back pain, nothing structurally wrong with my back will be found. It is the abnormal use of muscles that has created my discomfort not something intrinsically wrong with the back. Similarly, women who have experienced severe pain in the pelvis develop a series of responses to protect the area and decrease their discomfort, Women with pelvic pain walk with a characteristic gait and often develop severe spasm in the muscles in the pelvic floor.

Many women with chronic pelvic pain also suffer from irritable bladder and irritable bowel symptoms related to this muscle spasm.

The tension in the muscles that make up the pelvic floor causes sensations of fullness in the bladder when it is stretched only minimally. In addition, the increase in arousal, created by the release of stress hormones causes the muscles of the bladder and bowel walls to contract irregularly. This makes both the bladder and the bowel 'irritable'.

The evaluation and management of pelvic pain must encompass a careful search for severe and life-threatening processes which require immediate medical intervention coupled with a comprehensive history and physical examination looking for ALL of the possible areas of malfunction - not just a problem with the female organs. Evaluation by a physician with particular interest and expertise in pelvic pain is essential, especially for women with a longstanding problem. Because our bodies are hard-wired" to experience fear and anxiety when we have pain, women often feel concern about the cause of their pain. Even when a thorough search has not uncovered a problem in the pelvis, women continue to seek attention and even surgery due to the fear that there is something terrible causing injury to the body that the doctors have been unable to find.

Unfortunately, many gynecologists look only for sources of pain in the female reproductive organs and do not continue searching for the true cause of pain. Just like severe headaches are rarely caused by brain tumors, chronic pain is rarely caused by a specific structural problem within the pelvis. That is in no way saying that the pain is not real or that it should not be treated. Rather, it means that ultrasound and even laparoscopic surgery is often not very helpful in the evaluation of pelvic pain when the physical examination is normal.

Diagnosis

A careful and detailed history of the pain is the most useful tool we have in diagnosis of pelvic pain. When was the onset of the pain? Can you remember a time without pelvic pain? If so, what was going on when the pain began? What makes the pain better? What makes it worse? There is an entire questionnaire designed by the International Pelvic Pain Society to help health care providers sort out the various causes of pelvic pain. Completing such a questionnaire is extremely useful for both you and your health care provider. It helps to focus the medical evaluation on those areas most likely to be causing the pain, Diagnosis of pelvic pain also requires a detailed physical examination including examination of the back and its muscles, the abdominal wall and all of its structures, the pelvic floor (separately from the pelvic organs) and finally a careful assessment of the female reproductive organs, the bladder and the bowel. Rarely is any other test or study required.

Ovarian cysts or fibroid tumors of the uterus that are small and which are not appreciated on a careful physical examination are NEVER the source of pelvic pain. Both women and their physicians must avoid the temptation to intervene and treat a minor abnormality with the assumption that it must be the cause of the pain since nothing obvious was found on physical examination. These small lesions are actually very common and therefore almost always present if we look hard enough. The ovaries and uterus are innervated by the visceral nervous system, and are therefore incapable of "feeling" most of the kinds of pain women experience. When the physical examination is normal, it is important to search for musculoskeletal or functional problems that may be causing the pain. A functional problem does NOT mean that the pain is imagined. It means that the pain originates with the function rather than the structure of an organ.

For example, teenagers who suffer with terrible menstrual cramping often have nothing structurally wrong with the uterus, rather the uterus contracts so hard during a period that it does not have enough blood supply. The ischemia or lack of oxygen to the contracting muscle causes the severe pain. Similarly, people with irritable bowel syndrome do not have a structural problem with the intestines. Their bowels contract haphazardly rather than in the normal sequential fashion. This causes distension of isolated segments of the bowel and rapid onset of sharp, severe pain. A complete and careful history coupled with a skillful and focused physical examination is the most important tool for the diagnosis of pelvic pain. Finding a physician or health care provider who will take the time and energy to hear your story and carefully evaluate all of the possible sources of pain is the key to successful partnership in dealing with pelvic pain.

Treatment

The treatment of pelvic pain obviously depends on the cause of the pain. We must remember that our purpose must be to 1) treat any and all life-threatening medical emergencies and then 2) eliminate the suffering experienced by women with chronic pain. Acute pain in the pelvis requires immediate evaluation by a health care provider to identify the cause. It is interesting that some women experience repeated episodes of acute pain. This is often attributed to “ruptured cysts” on the ovaries; however abdominal wall muscle spasm or functional problems with the bowel are more likely the cause in most cases. Proper treatment obviously requires proper diagnosis.

Treatment of pelvic pain, whether acute or chronic, requires a trusting relationship with a skilled health care provider. It is not therapeutic to receive care by making repeated trips to the emergency room. That situation is designed only to diagnose and treat medically urgent conditions. Once such a condition has been ruled out, the providers have no commitment to finding and treating the cause of the pain. Their response is to treat women with narcotics so we can leave the ER, and then send us to someone else for follow-up care. Unfortunately, by the time the follow-up physician is seen, the pain may well have resolved. We strongly recommend that women who suffer from pelvic pain establish a working relationship with a caring and accessible physician. Only someone who has had the luxury of taking a full and complete medical, social and family history can evaluate a patient properly. These things cannot happen in the bustle of the emergency room.

Treatment of chronic pelvic pain is best accomplished in a multidisciplinary setting. A skilled gynecologic surgeon may be necessary to treat severe endometriosis or significantly enlarged fibroids; however, the body’s response to chronic pain must also be addressed by physical therapists and psychologists if we are to be truly successful in managing the pain on a long term basis. Women with chronic pelvic pain almost universally also suffer from depression (who wouldn’t be when they are in pain all the time?) which increases their perception of pain. In addition, for many women, the pelvic floor muscles have become chronically tense protecting the pelvis from jarring and increased pain. That muscle tension in and of itself may become the overwhelming source of pain. Physical therapists specifically trained in the evaluation and management of pelvic floor disorders can be amazingly helpful. Many conditions such as adhesions or severe endometriosis may never be totally “cured” surgically. Nevertheless, the pain associated with them can be almost completely resolved with careful, comprehensive, multidisciplinary care.

Disorders of the abdominal wall or pelvic floor are often managed with physical therapy. Sometimes nerves can become trapped in abdominal wall scars creating severe burning, searing

pelvic pain. These nerves can be injected with a combination of local anesthetics and steroids with dramatic improvement in pain. Once again, the key to the successful treatment of pelvic pain is accurate diagnosis and a trusting, therapeutic relationship with a health care provider who will listen and continue to pursue strategies for management until quality of life has been restored.