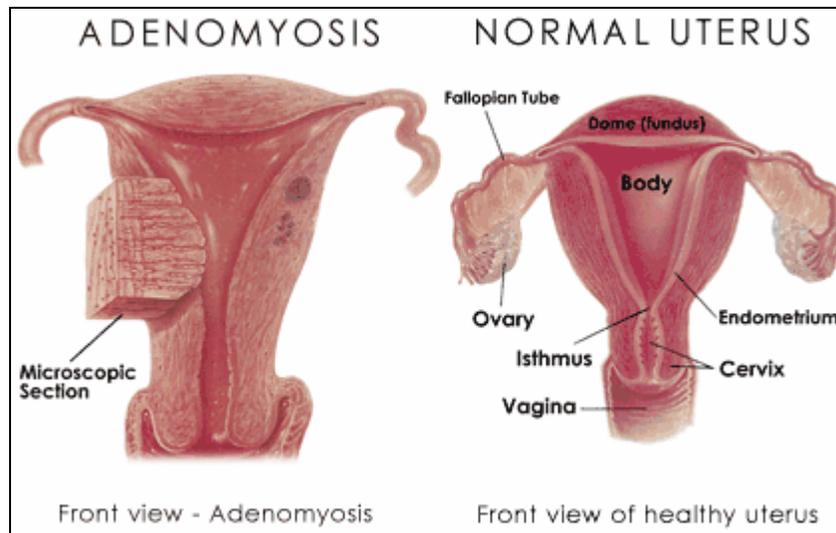


Adenomyosis

What Is Adenomyosis?

Since you are reading this description, someone must have mentioned the word adenomyosis to you. Unfortunately, there is not a great deal of literature describing this condition. Ordinarily, you would have to go to a gynecologic textbook in order to find any mention of this condition. In fact, until recently, it has been very difficult to find any mention of this even on the Internet. Adenomyosis is a gynecologic condition in which the endometrial glands, which should ordinarily be confined to the surface of the inside of the uterine cavity, grow abnormally deep into the muscle of the uterus itself. These endometrial glands should not be located in the muscle of the uterus, but once they have invaded into that area they can cause the symptoms associated with adenomyosis. Adenomyosis is sometimes referred to as endometriosis interna or uterine endometriosis. This is really a misnomer, because the two conditions are really unrelated. The only common feature is the presence of endometrial glands and stroma in an abnormal location. With endometriosis, the endometrial glands can be located outside of the uterus, on the surface of the uterus, on the ovaries, or any location outside of the uterus. With adenomyosis, the endometrial glands are located deep within the wall of the uterus itself. But other than abnormally located endometrial glands, the two conditions are really not related.



What causes adenomyosis?

The cause of adenomyosis is basically unknown. Symptomatic adenomyosis usually presents in women between the ages of 35 and 50. There seems to be an increased incidence associated with any childbirth, pregnancy terminations, D&C, and cesarean sections. One theory states that any trauma to the uterus may increase the chance that endometrial tissue becomes relocated from the uterine lining. Another theory states that high levels of estrogen in the body stimulate abnormal growth of the endometrium, and for some unknown reason, the barrier between the endometrium and the uterine muscle is broken, and this allows the endometrial glands to invade into the muscle of the uterus itself. Despite all of these theories, studies, and associations, the pathogenesis of adenomyosis remains unknown.

Is it common?

The background incidence of adenomyosis in all women is not precisely known. Until the advent of MRI, the only way to make the diagnosis of adenomyosis was by looking at the uterus under the microscope, which, of course, could only be accomplished after hysterectomy. In some studies of chronic pelvic pain in which women had hysterectomies, the incidence of adenomyosis was about 25%. However, in other studies, when multiple serial sections of the uterus were obtained, the incidence was 60% in women 40 to 50 years of age. Some of those women had symptoms, and some of them did not. But clearly, adenomyosis is common.

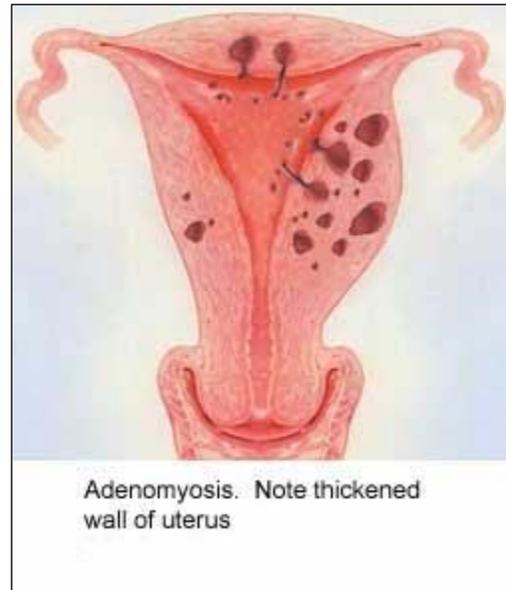
Signs and symptoms .

Symptomatic adenomyosis usually presents in women between the ages of 35 and 50. The majority of women with adenomyosis have minor symptoms that do not annoy them enough to seek medical care. As the adenomyosis becomes increasingly more severe, the woman begins to have pelvic pain that feels similar to an exaggerated menstrual cramping sensation. As the disease progresses further, this pain can become quite severe, and in fact, can become so severe that the woman describes it as labor pain. In the beginning of the disease process the pain usually presents during the several days prior to the menstrual cycle, and becomes most severe during menstrual flow. However, as the disease progresses, that pain can come to occupy several weeks during the month.

Another common symptom of adenomyosis is menstrual bleeding abnormalities. As the disease process begins, the woman usually notices that her menstrual cycles are much heavier than they were previously. The bleeding can become heavy enough that the woman begins to have large blood clots, and can even lose an unusual amount of blood during her menstrual cycle. This can sometimes become so severe, that the woman begins to develop anemia as a result of chronic severe blood loss. Other times, the woman will begin to have bleeding in between her menstrual cycles. And at times, this can become so severe that the woman feels that she is bleeding all the time.

Sometimes, the woman will start to develop pain during intercourse. This pain tends to be located deep in the pelvis. And this can sometimes become so severe that the woman begins to avoid sexual intercourse altogether.

On pelvic examination the uterus is diffusely enlarged, usually two to three times normal size. The uterus can feel soft and boggy on pelvic exam. The uterus is often described as globular and tender especially immediately before and during menstruation.



Medical studies

Several medical examinations are usually performed by your health-care provider when the diagnosis of adenomyosis is suspected. Because of the presence of abnormally uterine bleeding, a biopsy from the inside of the uterine cavity is usually performed. The biopsy does not in fact diagnose adenomyosis. But it is usually done because of the abnormal uterine bleeding, to help the clinician to feel reassured that the abnormal uterine bleeding is not being caused by an endometrial cancer.

A vaginal sonogram is usually performed during the course of the examinations. And on vaginal sonogram, the clinician can sometimes see sonographic evidence suggestive of adenomyosis. But again, this is fairly unreliable, and the sonogram is really being done to look for signs of other things that can be corrected, such as endometrial polyps or fibroids.

More recently, MRI has been used to further characterize the condition. And on MRI, the adenomyosis can appear as diffuse thickening of the endometrial-myometrial junctional zone. Or when focal adenomyosis is present, can appear as a round or oval mass contained within the muscle of the uterus. But again, MRI can sometimes miss the diagnosis, and sometimes the diagnosis will only be made after the uterus is studied under the microscope after hysterectomy. Sonogram and MRI are most useful to help differentiate between adenomyosis and uterine fibroids in a young woman desiring future childbearing.

Therapy

Unfortunately, there is no satisfactory medical treatment for adenomyosis. Studies have demonstrated a lack of progesterone receptors in tissue from adenomyosis. There are also fewer estrogen receptors than in normal endometrial tissue. This lack of receptors helps to explain the lack of responsiveness of adenomyosis to hormonal therapy. Nevertheless, particularly in the woman who desires future fertility, hormonal therapy such as oral contraceptive pills is attempted. The goal of the hormonal therapy is not to get rid of the adenomyosis, but rather to try to control the symptoms.

Another therapy that can be tried for abnormal bleeding problems in a woman who desires uterine conservation is the progesterone releasing IUD. The intrauterine device is placed within the uterine cavity, and it slowly releases progesterone. Again, the goal is to attempt to control the abnormal uterine bleeding in an attempt to avoid hysterectomy.

Another hormonal manipulation is a GnRH agonist. Two common brand names for these types of medications are Depo-Lupron and Synarel. The object of these medications is to shut down your ovaries, decrease hormone production, and thereby hopefully reduce the symptoms of adenomyosis. These medications can sometimes be used to temporarily alleviate the pain of adenomyosis. The problem is that the adenomyosis seems to recur after discontinuing the therapy, and these medications can only be used for a maximum of six months. So once the therapy is stopped, the symptoms can return. And unfortunately, in the meantime, the medications make you feel like you are going through menopause.

Hysteroscopic endometrial ablation is a new type of surgical procedure that can be attempted for adenomyosis. Hysteroscopic endometrial ablation is an outpatient surgical procedure that is performed under anesthesia in an operating room. During this procedure the physician inserts a camera into the inside of the uterus, and attempts to burn the entire inside lining of the uterus, in an attempt to decrease or completely eliminate menstrual flow. The advantage of this type of surgery is that it's minimally invasive, it is an outpatient surgery, and recovery is very quick. The disadvantage, however, is that it does not always work. And while it may be an option in a woman whose primary problem is abnormal uterine bleeding, it is much less effective when pain is a prominent component of the disease process. Several studies have indicated that endometrial ablation will only eliminate menstrual bleeding in about 50 to 60% of women.

Hysterectomy is, of course, the definitive treatment for this condition. Hysterectomy will alleviate the pain, and the abnormal bleeding of adenomyosis, but can only be attempted when the woman has completed her family, and desire is no future fertility. Hysterectomy is a definitive surgical management of the problem of adenomyosis, but it is a big surgery, and you and your health-care provider will decide if this is the right treatment for you.

As always, this document is here to help you understand what may be going on with your body. It is not meant to substitute for conversation with your health-care provider. We encourage you to sit down with your provider at any time, ask questions, understand the process, and you and your health-care provider can come up with a decision that is right for you.