Endometriosis: Symptoms, Treatment, Diagnosis

*What is Endometriosis?*

**Endometriosis** is when the tissue that makes up the *uterine lining* (the lining of the womb) is present on other organs inside your body. Endometriosis is usually found in the lower abdomen, or pelvis, but can appear anywhere in the body. Women with endometriosis often have lower abdominal pain, pain with periods, or pain with sexual intercourse, and may report having a hard time getting pregnant. On the other hand, some women with endometriosis may not have any symptoms at all.

Endometriosis is estimated to affect between 3% and 10% of reproductive-aged women. Endometriosis can only be truly diagnosed by a doctor performing a laparoscopy (a surgery where a doctor looks in the abdomen with a camera usually through the belly button) and taking a sample of a suspected abnormality. Thus, the proportion of women affected by endometriosis differs among women having surgery for different reasons. In women without symptoms who are having surgery for elective sterilization (having their tubes tied), 1-7% will actually have endometriosis diagnosed at the time of their surgery, as will 12-32% of women having surgery for pelvic pain, and 9-50% of women having surgery for infertility. Endometriosis is rarely found in girls before they start their period, but it is found in up to half of young girls and teens with pelvic pain and painful periods.

**How does Endometriosis Happen?**

*Causes of Endometriosis*

There are several different ideas of how and why *endometriosis happens*. One idea is that when a woman has her period, some of the blood and tissue from her uterus travels out through the fallopian tubes and into the abdominal cavity. This is called retrograde menstruation. Another idea is that some
cells in the body outside of the uterus can change to become the same kind of cells that line the uterus. This is a common explanation for endometriosis at unusual sites like the thumb or knee. Another possible explanation is that the cells from the lining of the uterus travel through the blood vessels or through the lymphatic system to reach other organs or body areas. Also, endometriosis can spread at the time of surgery. For example, a woman with endometriosis that undergoes a cesarean section could inadvertently have some endometriosis cells attach to the abdominal incision so that she has endometriosis in the scar from the surgery.

Interestingly, nearly all women have some degree of retrograde menstruation, but only a few women will get endometriosis. This may be due to differences in a woman's immune system. Also, endometriosis is much more common if a close relative also has endometriosis, so there may be genes that influence endometriosis.

**Why is Endometriosis Associated with Pain?**

When a woman with endometriosis has her period, she has bleeding not only from the cells and tissue inside the uterus, but can also have bleeding from the cells and tissue outside the uterus. When blood touches these other organs, especially inside the abdomen, it can cause inflammation and irritation, creating pain. Sometimes, scar tissue can also develop from the endometriosis which can also contribute to the pain.

**Why is Endometriosis Associated with Infertility?**

**Endometriosis and Fertility**

Between 20 and 40% of women with infertility will have endometriosis. Endometriosis seems to impair fertility in 2 ways: first, by causing distortion of the fallopian tubes so that they are unable to pick up the egg after ovulation, and second, by creating inflammation that can adversely affect the function of the ovary, egg, fallopian tubes or uterus.
Symptoms of Endometriosis

*Endometriosis Symptoms*

Pain, including pelvic or lower abdominal pain and pain with menses, is the most common symptom of endometriosis. Women may also have pain with intercourse. The symptoms are often "cyclical" meaning that the pain is worse right before or during the period, and then improves. Women may have constant pelvic or lower abdominal pain as well. Other symptoms include subfertility, bowel and bladder symptoms (such as pain with bowel movements, bloating, constipation, blood in the urine, or pain with urination), and possibly abnormal vaginal bleeding.

How is Endometriosis Diagnosed?

*Diagnosing Endometriosis*

To diagnose endometriosis, a doctor must perform a laparoscopy (a surgery where a doctor looks in the abdomen with a camera usually through the belly button) and take a sample of a suspected endometriosis lesion. Some physicians and patients may try to treat suspected endometriosis with certain medications to see if symptoms are improved without having to undergo surgery. Although this may be possible, endometriosis cannot be diagnosed by improvement in symptoms with medication alone. During surgery, endometriosis lesions are often described as looking like "cigarette burns" inside the abdomen, although there are many different variations as to how an endometriosis lesion may appear. Endometriosis can be located on and even within an ovary, causing an endometrioma, or a cyst of endometriosis. These cysts are often referred to as "chocolate cysts," because the material inside the cyst looks like chocolate syrup.
How is Endometriosis Treated?

Endometriosis Treatment

The most conservative therapy for endometriosis is with medications. Non-steroidal anti-inflammatory medications, like ibuprofen, may help with the pain associated with endometriosis. Some doctors may prescribe medications that affect a woman's hormones in order to help with endometriosis pain. Some examples are oral contraceptive pills and gonadotropin releasing hormone (GnRH) agonists, the latter of which put women into a “temporary” menopause-like state.

Surgery can not only help to diagnose endometriosis, but can also be used to treat endometriosis. Surgery can be used to remove the endometriosis or to burn the endometriosis lesions outside of the uterus to make them go away. It is also used to get rid of scar tissue so that the ovaries and tubes can go back to their normal location in the pelvis. Surgery has been shown to improve pain symptoms associated with endometriosis and may also help women become pregnant. If a woman with endometriosis is not interested in becoming pregnant, she and her doctor may decide to remove the ovaries and possibly the uterus. A woman cannot become pregnant if she doesn’t have a uterus.

If a woman with endometriosis is having trouble getting pregnant, there are different medications and treatments available that can help her to become pregnant.