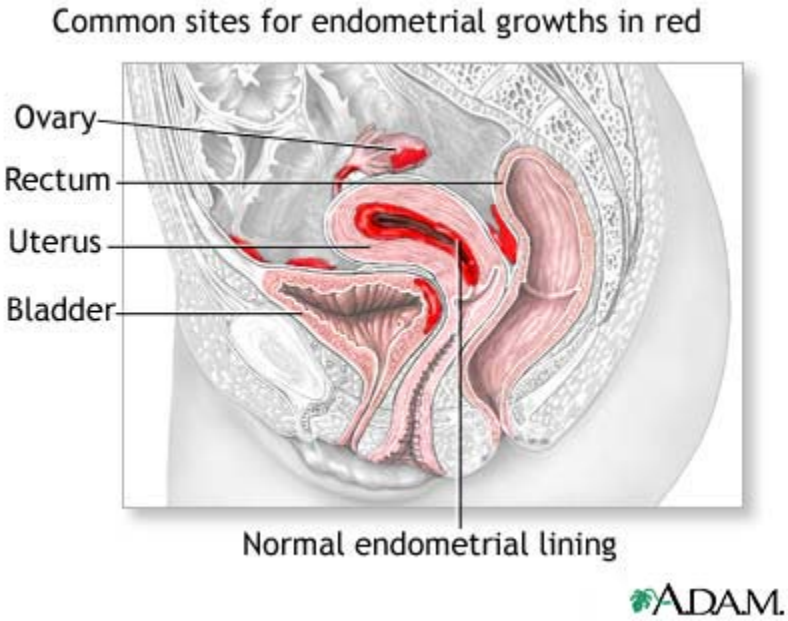
Endometriosis

Definition

Endometriosis is a condition in which the tissue that normally lines the uterus (endometrium) grows in other areas of the body, causing pain, irregular bleeding, and possible infertility.

The tissue growth (implant) typically occurs in the pelvic area, outside of the uterus, on the ovaries, bowel, rectum, bladder, and the delicate lining of the pelvis. However, the implants can occur in other areas of the body, too.



Causes

The cause of endometriosis is unknown. However, there are a number of theories. One suggests that the endometrial cells (loosened during menstruation) may "back up" through the fallopian tubes into the pelvis, where they implant and grow in the pelvic or abdominal cavities. This is called retrograde-menstruation.

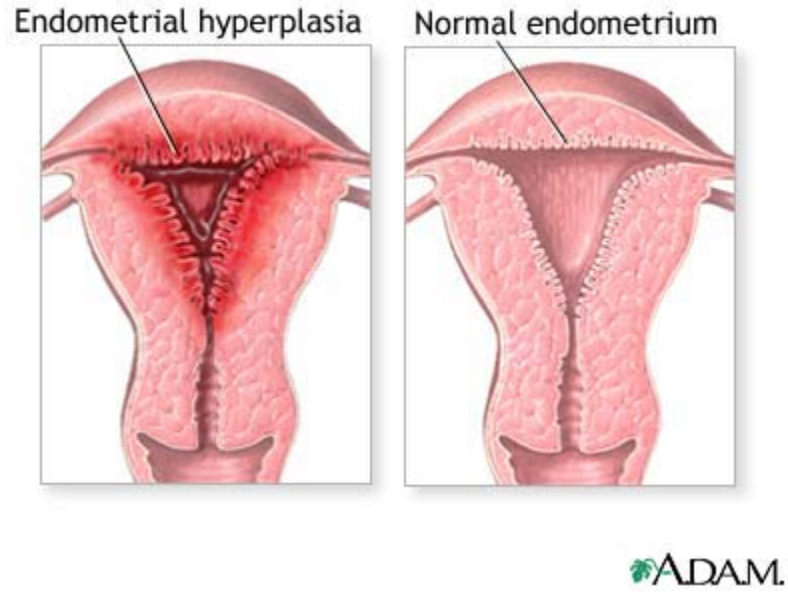
Other theories include:

- A faulty immune system causes menstrual tissue to implant and grow in areas other than the uterine lining.
- Cells lining the abdominal cavity may spontaneously develop endometriosis.
- Certain families may have genetic factors that make a woman more prone to endometriosis

Each month the ovaries produce hormones that stimulate the cells of the uterine lining (endometrium) to multiply and prepare for a fertilized egg. The lining swells and gets thicker.

If endometrial cells are implanted outside the uterus, or elsewhere, it can cause problems. These cells also respond to the monthly hormone stimulation. Unlike cells normally found in the uterus that fall off during menstruation, the ones outside the uterus stay in place. They sometimes bleed a little bit, but they heal and are stimulated again during the next cycle.

This ongoing process can cause scarring and adhesions in the tubes and ovaries, and at the end of the fallopian tubes. (The adhesions can make it hard for reproductive cells to move from the ovary to the fallopian tube. They can also stop a fertilized egg from passing down the fallopian tube to the uterus.)



Endometriosis is a common problem. It occurs in an estimated 10% of women during their reproductive years. The rate may be as high as 35% among infertile women. Although endometriosis is typically diagnosed between the ages of 25 and 35, the problem probably begins about the time that regular menstruation begins.

A woman who has a mother or sister with endometriosis has a 6 times greater risk of developing endometriosis than the general population. Other possible risk factors include starting menstruation at an early age, regular menstrual cycles, and long periods (lasting 7 or more days).

Symptoms

- Increasingly painful periods
- Lower abdominal pain or pelvic cramps that can by felt for a week or two before menstruation
- Lower abdominal pain felt during menstruation (the pain and cramps may be steady and dull or quite severe)
- Pelvic or low back pain that may occur at any time during the menstrual cycle
- Pain during or following sexual intercourse
- Pain with bowel movements
- Premenstrual spotting
- Infertility

Note: Frequently, symptoms may not be present. In fact, some women with severe cases of endometriosis have no pain at all, while some women with only a few small implants have severe pain.

Exams and Tests

A pelvic examination may reveal the presence of tender nodules, with a lumpy consistency. These are often found in the posterior vaginal wall or adnexa (ovary regions), and they may sometimes be felt in healed wound scars (especially those from episiotomy and C-section). There may be pain with uterine motion.

The uterus may be fixed or retroverted. A pelvic ultrasound test may detect an endometrioma on an ovary. A laparoscopy is necessary for a definite diagnosis, but most patients can start treatment without this.

Treatment

Treatment depends on the how bad the symptoms are, the severity of the disease, the woman's desire to have children in the future, and her age.

Some women with mild disease and symptoms may just be monitored. It is important to maintain a regular schedule of examinations (every 6 to 12 months) to note any changes or to see if the disease has gotten worse.

Painkillers (analgesics) may be given to relieve pain.

Stopping the menstrual cycle creates a state resembling pregnancy (pseudopregnancy) and can help prevent the disease from getting worse. Pseudopregnancy can be created using oral contraceptives containing estrogen and progesterone. Women take the medicine consistently for 6 to 9 months. This type of therapy relieves most of the symptoms, but does not prevent scarring from the disease. Side effects include spotting of blood.

Hormonal therapy using progesterone medications are another effective treatment for endometriosis. Progesterone pills or injections can be used. However, side effects can be a problem for some women. The possible side effects include depression, weight gain, and spotting of blood.

Anti-gonadotropin drugs such as Synarel and Depo Lupron prevent the ovary from producing estrogen. Potential side effects of these drugs include menopausal symptoms (such as hot flashes), vaginal dryness, mood changes, and early loss of calcium from the bones.

Due to the effects on bone density, treatment of endometriosis with anti-gonadotropin drugs is usually limited to 6 months. Treatment can be extended up to 1 year if small doses of estrogen and progresterone are slowly given to reduce bone weakening and side effects.

Surgery (either laparoscopy or laparotomy) is usually only performed on women with severe endometriosis, including those with adhesions and infertility problems. The goal of surgery is to remove or destroy all of endometriosis-related tissue and adhesions, and restore the pelvic area to as close to normal as possible. In rare cases, nerve removal (neurectomy) may be performed during surgery to further relieve the pain associated with endometriosis.

Woman with severe symptoms or disease who do not want children in the future may have surgery to remove the uterus (hysterectomy), both ovaries, both fallopian tubes, and any remaining adhesions or endometriosis implants. Hormonal replacement therapy may be needed after removal of the ovaries.

Outlook (Prognosis)

How well surgery helps improve fertility depends on the severity of the endometriosis. Pregnancy rates after surgery in women previously considered to be infertile are approximately 75% for mild endometriosis, 50-60% for moderate cases, and 30-40% for severe cases.

Possible Complications

Infertility may result from endometriosis, but not in every patient -- especially if the endometriosis is mild. Endometriosis has been known to come back even after a hysterectomy. Other complications are rare. In a few cases endometriosis implants may cause blockages of the gastrointestinal or urinary tracts.

When to Contact a Medical Professional

Call for an appointment with your health care provider if symptoms of endometriosis occur, or if back pain or other symptoms come back after treatment of endometriosis.

Screening for endometriosis should be considered if your mother or sister has been diagnosed with endometriosis or if you are unable to become pregnant after trying for 1 year.

Prevention

There is no proven prevention for endometriosis. Women with a strong family history of endometriosis may consider taking oral contraceptive pills, as this treatment may help to prevent or slow down the development of the disease.

References

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