



Fact Sheet

From ReproductiveFacts.org



The Patient Education Website of the American Society for Reproductive Medicine

Fibroids and Fertility

What are fibroids?

Uterine fibroids (also called myomas or leiomyomas) are benign (noncancerous) tumors of muscle tissue that can change the shape or size of the uterus and sometimes the cervix. They start in the smooth muscle cells inside the wall of the uterus (myometrium). Fibroids usually occur in the form of multiple tumors, although single fibroids are sometimes possible.

Fibroids are noted in 20% of women in the reproductive years, but those of African descent have been shown to have a higher incidence of fibroid formations (50-80%). Whether fibroids cause symptoms or require any type of treatment depends on their location and size in the uterus. Fibroids occur when a single muscle cell in the wall of the uterus multiplies to form a noncancerous tumor. The exact cause of uterine fibroids is unclear, but there is evidence that it may be a combination of genetic, hormonal, and environmental factors.

Fibroids are usually found in or around the body of the uterus, but they sometimes occur in the cervix. Fibroids within the uterus can be divided into three categories: subserous (located in the outer wall of the uterus); intramural (found in the muscular layers of the uterine wall); and submucous (protruding into the uterine cavity). In addition, fibroids can be connected to the uterus through a stalk (pedunculated), or fibroids can be attached to nearby organs, like the bladder and bowel, or the ligaments surrounding the uterus. About 55% of fibroids are subserosal; 40% are intramural; and 5% are submucosal. Fibroids are rarely found outside the pelvic cavity.

Can fibroids decrease fertility?

Uterine fibroids are common, and they are found in 5-10% of infertile women. Certain types of fibroids are known to decrease fertility. They include fibroids that are inside the uterine cavity and very large fibroids (>6 cm in diameter) that are located within the wall of the uterus. Because most women with fibroids will not be infertile, they and their partners should have a thorough evaluation to detect other problems that can decrease fertility. A fertility specialist can help determine if fibroids might be hampering their ability to conceive.

How do fibroids cause infertility?

There are several explanations for why uterine fibroids may reduce fertility.

- Changes in the position of the cervix (the vaginal opening to the womb) due to fibroids located above it may affect the number of sperm that can travel through the cervix.
- Changes in the shape of the uterus can interfere with sperm movement.
- Blockage of the fallopian tubes by the fibroids.
- Affecting the blood flow to the uterine cavity where the embryo would implant.
- Changes in the uterine muscle that prevents movement of the sperm or the embryo.

What happens to fibroids during pregnancy?

Fibroids are found in 2% to 12% of pregnant women. Not all fibroids will increase in size and complicate a pregnancy. If a fibroid grows, it will typically do so in the first 12 weeks of pregnancy and sometimes shrink as the pregnancy continues.

What can happen if a fibroid does grow during pregnancy?

In some instances, fibroids can possibly outgrow their blood supply and cause severe pain that might lead to hospitalization. Also, fibroids can change the baby's presentation (position at birth), increase the risk of a cesarean section, miscarriage and preterm delivery. The management of uterine fibroids depends on your doctor's recommendations. Rarely is surgery necessary or performed during pregnancy.

Summary

Uterine fibroids are common and can affect fertility in many ways. They can affect ovulation, fertilization and implantation. Treatment options vary, but treatment will help to address the gynecologic symptoms of fibroids and improve overall fertility. The management of uterine fibroids will depend upon the severity of your symptoms and your doctor's recommendations.

Revised 2011

For more information on this and other reproductive health topics, visit www.ReproductiveFacts.org