

Microsurgical Tubal Ligation Reversal

What Is Microsurgical Tubal Ligation Reversal?

Microsurgical tubal ligation reversal (also called microsurgical tubal reanastomosis) is a surgical procedure to repair the fallopian tubes after a tubal ligation in a woman who wishes to attempt pregnancy again. Microsurgery is a highly specialized surgical procedure using an operating microscope to magnify tissues so that tiny needles and sutures can be used. This is considered the most successful type of surgery for delicate structures such as the fallopian tubes. The procedure requires a small laparotomy (major surgery) incision, a 2-4 hour highly technical surgery, and 1-2 days in the hospital or surgery center.

Are Any Tests Necessary Before Tubal Ligation Reversal?

We recommend a limited evaluation of a couple before this procedure. The woman is asked to keep basal body temperature (BBT) charts for 1-2 months to assure normal ovulation. A semen analysis is requested from the husband to make sure he has an adequate sperm count. A special test (called a hysterosalpingogram) is performed to make sure that the inside of the uterus is normal and to see how much of the fallopian tube is left next to the uterus on each side. If the surgery report from the tubal ligation is unclear or other surgery has been done, a laparoscopy is sometimes recommended to make sure there is enough fallopian tube remaining to give a reasonable chance of pregnancy.

How Is The Procedure Done?

A small incision ("bikini incision") is made in the lower abdomen under general anesthesia. The closed ends of the fallopian tube on each side are opened under the microscope and sewn back together with absorbable (dissolving) sutures so small they cannot be seen with the naked eye. Although this type of surgery is not considered dangerous, it generally takes 2-4 hours because of the technical aspects of working with very small structures.

What Are The Chances Of Pregnancy After This Procedure?

The normal fallopian tube is 10 cm (about 4 inches) in length. The major factor in the success rate after microsurgical tubal reanastomosis is the type of tubal ligation originally performed and how much of the fallopian tubes have been damaged. The success rate for this procedure, if performed by a microsurgery specialist, is 10% per cm of fallopian tube length after reanastomosis. For example, if a woman has 8 cm of tube after reconstruction, her chances of pregnancy would be 80%. If she only has 4 cm of fallopian tube left for reanastomosis, her chances of pregnancy would be 40%. Other factors which may influence the success rate include the age of the women, her previous fertility history, the presence of endometriosis or scar tissue around the fallopian tubes, and the sperm count and prior fertility of the male partner.

What Is The Recovery Period After The Procedure?

The majority of our patients have been able to return to work half-time after 2 weeks and full-time after 3 weeks. Some women have returned to work and activities in a much shorter time, and your recovery will depend greatly on your specific type of work.

When Can We Attempt Pregnancy After The Procedure?

It is not necessary to wait more than 1-2 weeks after the procedure before beginning to attempt pregnancy. Some of our patients have become pregnant before their first expected menstrual period. We recommend waiting to start intercourse until you feel comfortable with your recovery and activities, but there is no danger of disrupting the surgery, increasing complications with pregnancy, or causing any other problems.

Are There Any Alternatives To This Procedure?

The alternatives to microsurgical tubal ligation reversal include adoption and in vitro fertilization (IVF). IVF is a less expensive alternative but has a success rate of only 20-25%. In addition, it requires fertility drug treatment and multiple visits to the office for monitoring, egg retrieval, and embryo transfer. If a woman has a 30% or less chance of pregnancy with tubal ligation reversal, IVF would be a better choice. If she has a 60% or more chance with surgery, most experts would recommend this procedure.

Are There Any Risks Of This Procedure?

Although it is technically considered major surgery, microsurgical tubal ligation reversal is a very safe operation. The surgery is not performed around any vital organs and is associated with minimal blood loss. There are always small risks of surgery such as infection, bleeding, reaction to medications, and anesthetic problems, but these are very rare with this procedure. If a woman becomes pregnant after tubal ligation reversal, there is a one in ten chance of ectopic (tubal) pregnancy. We recommend close follow-up of any suspected pregnancy after this procedure. If the pregnancy is in the uterus, a woman can have a normal pregnancy, labor, and delivery just as if she had never had a tubal ligation.