Laparoscopy

Southern Ontario Fertility Technologies

Introduction

Laparoscopy is a common surgical procedure where a very small incision is made in the abdominal wall and an instrument much like a telescope is inserted into the abdomen to view the contents. Fortunately laparoscopy can be done as an **outpatient** (same day surgery) and general anesthesia makes it almost painless. Because only small incisions are made there is seldom much pain afterwards and most women are able to resume normal activities in a day or two.

Indications for Laparoscopy

Two kinds of laparoscopy are done. **"Diagnostic"** laparoscopy involves the insertion of the laparoscope (usually through a small incision below the navel) and a second instrument through an incision just at the top of the pubic hairline. This type of laparoscopy is done to look inside the abdominal cavity and is often used **to investigate abdominal pain or infertility**. Sometimes laparoscopy will be used to investigate a pelvic examination or ultrasound that has made your doctor suspicious about endometriosis or an ovarian cyst or some other pelvic problem.

Indications for Laparoscopy

1. **Pelvic pain**
2. **Ovarian cyst**
3. **Tubal Ligation**
4. **Infertility**
   - **3 years**
   - **painful periods**
   - **painful intercourse**
   - **previous surgery or infections (PID)**
   - **abnormal hysterosalpingogram**
   - **failure of infertility treatment**
   - **for ovarian cautery**

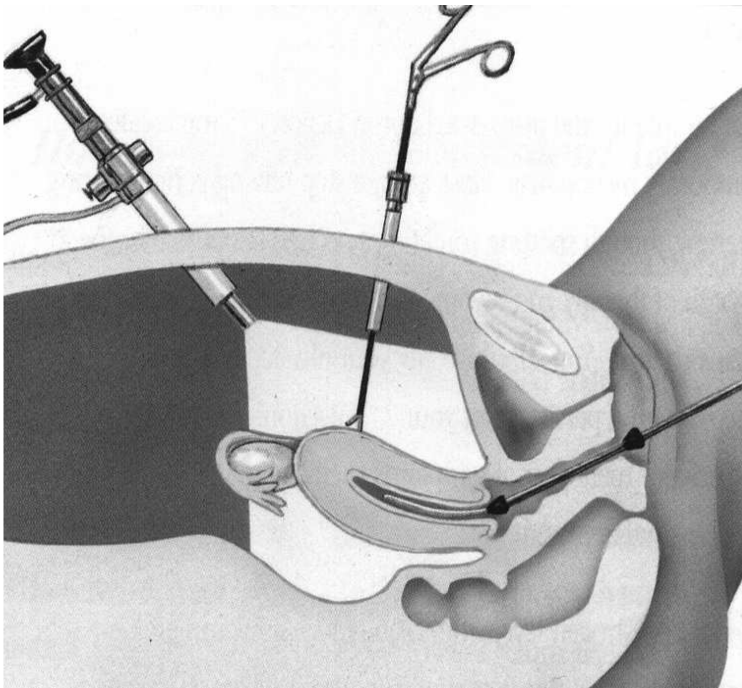
Laparoscopy is often done to investigate infertility. When to perform this surgery will be decided on many factors and is a decision you will make in consultation with your infertility doctor. Usually laparoscopy is considered after three years of infertility but this is only a general guideline. For example, if you have been trying to get pregnant for three years but no infertility treatment has been attempted, we will probably postpone laparoscopy until you have at least a short trial of reasonable treatment. If however, you have a history of abdominal surgery, pelvic pain or painful intercourse, a laparoscopy may be considered earlier. A laparoscopy is usually done if a hysterosalpingogram does not demonstrate open tubes. If the hysterosalpingograms demonstrates one tube open and one tube not, a laparoscopy will be considered but not necessarily immediately. In these circumstances, usually the tubes are found to be normal.

Polycystic Ovary Syndrome was called Stein-Leventhol Syndrome after two gynecologists who first investigated women who did not ovulate. They took wedge biopsies from the ovaries of these women. However, they found that when they did the biopsies, the women would often start to ovulate! This is now believed to work because it decreases the intra-ovarian male hormone level and can be more easily done by burning the surface of each ovary in 6-10 places during a laparoscopy.

"Operative" laparoscopy is essentially the same procedure as "diagnostic

laparoscopy" except that some operation is done in the abdominal cavity using the laparoscope. The most common "operative laparoscopy" is a tubal ligation. It usually involves at least one more small incision and additional time under general anesthesia. However, it involves very little additional post-operative discomfort. It is most often used to remove ectopic pregnancies, endometriosis or ovarian cysts. Laparoscopic treatment of endometriosis is associated with a 70% chance of significant pain relief if the endometriosis was causing pain and a significant improvement in pregnancy rates. In infertility treatment, one of the common operative procedures is to perform ovarian cautery or drilling (separate information sheet available). Although this may sound crazy, it has proven very effective at promoting ovulation it women who are resistant or reacting sub-optimally to ovulation induction drugs. The development of this is outlined in the box.

The Procedure



The first step in laparoscopy is **anesthesia**. This involves an intravenous (IV) through which medication will be given that will put you to sleep. After you are asleep a tube is put in your airway to help you breath.

Your abdomen will be cleansed and sterile sheets will be placed at the sides, bottom and top to prevent infection. The same solution will also be used to cleanse the vagina, as often instruments have to be used in this area as well.

A small incision is made at the bottom edge of the navel and a special needle or a trocar is inserted through the incision. Gas is then put in the abdominal cavity through the needle or trocar. This makes it easier and safer to see with laparoscope and allows your physician a better view inside.

Any other incisions are then made and the instruments inserted while viewing through the laparoscope.

When the examination (and any procedure) is over, the gas and instruments are removed and the incisions are closed with small stitches.

You are then taken to **the "recovery room"** usually as you are just starting to wake up. There will be a nurse in the recovery room to take care of you as you come out of the anesthetic which usually takes 45-60 minutes. Once you are awake you will leave the recovery room and be allowed to rest in the post-surgical unit until you go home. Your husband or other support person can be with you in the post-surgical unit but not in the recovery room.

Hysteroscopy with the Laparoscopy

Hysteroscopy is similar to laparoscopy but refers to placing a telescope-type instrument into the cavity of the uterus. It may be considered if there are unanswered questions about the uterine cavity. Hysteroscopy, like laparoscopy can be operative. It is often used to remove polyps, fibroids or uterine septum. If it is combined with the laparoscopy, this will be discussed with you. It usually causes no more post-operative discomfort. An information sheet is available on hysteroscopy.

Informed Consent

Long before surgery you should understand the **reasons** for the procedure. You should also understand the **very small risks** that may be involved. Occasionally the procedure cannot be done. The risk of this is higher if you are overweight because the trocar which is originally inserted is one length and may not be able to reach through the entire abdominal wall. Sometimes when the instruments are being inserted, an injury occurs to the bowel, bladder or a blood vessel. This may require the procedure to be changed to a laparotomy were a large incision has to be made to gain access to the abdominal cavity. Infection can occur but is usually confined to the small incisions. It is not uncommon for the lower incisions to become slightly infected. This is because your skin carries a higher bacterial load in this area. Often, minor infections of the stab wounds can be corrected by warm, wet compresses. Occasionally something will be found that requires a full operation (laparotomy) to be performed. Unless this is life threatening, you will usually be woken up and a larger operation planned for a later date.

All of these complications together occur in **less than 1% of patients** so they are unlikely to happen to you but you must be aware that they can occur. You will be asked to sign a “consent” form on the day of the laparoscopy that states you are aware of these. Sometimes, when we list off all of the complications, it can be overwhelming and is a wonder that anybody goes ahead with the procedure! It helps to put this in perspective to realize that a tubal ligation is done by laparoscopy and may women have this procedure without experiencing any complication.

Before The Surgery

Do not eat or drink from midnight before the day of surgery. The exception to this is when you take a medication every day. Usually you will be instructed to skip a day of your medication, take it after surgery or take it before surgery with only a sip of water. You will be instructed on which of these options is best. It usually depends on exactly what medications you are taking. Be sure to discuss this with your physician before the surgery. Notify your doctor if you feel ill or develop a fever. Tell your doctor immediately if you suspect you are pregnant. The laparoscopy should not be done in these circumstances until a pregnancy test is performed. If you state this concern early as soon as you are admitted for the surgery, it can often be done quickly so that no delay occurs in performing the surgery. Otherwise follow your usual routines before surgery and report to patient registration at the instructed time on the day of surgery.

After The Laparoscopy

Your doctor may try and tell you the results of the procedure in the recovery room but it is difficult for you to remember what is said because of the anesthetic. It is helpful if you give the physician **permission to explain the results to someone who waits** in the waiting room while you are having the procedure. If this is not possible, the doctor may be able to place a telephone call right after the surgery. Many times you or the person waiting for you will be given an information sheet outlining what was found and done during the surgery. Usually a postoperative appointment is scheduled about two weeks after the surgery when the results of the surgery can be explained in detail.

You will be given a **prescription for a painkiller** before you leave the hospital. It is wise to fill this even if you are not experiencing much pain right after the surgery in case the pain increases during your first post-operative night. You will probably experience some pain in your neck, shoulders and abdomen. This is normal and should be adequately treated with the prescription you are given. If your pain is not controlled or becomes worse after the first 24 hours, consult your physician.

You may have some **nausea** after the surgery. Restricting your food intake to small, frequent sips of clear fluids for the first 24 hours can often treat this. If this does not control it, sometimes "Gravol ™", which you can get at a drug store without a prescription will help. Gravol is available in 50 mg tablets or 100 mg suppositories and can be taken every four to six hours. However, many people feel fine the evening after surgery and if so there is no reason you can't enjoy a full meal.

Some women have a small amount of **vaginal bleeding** after a laparoscopy. This is normal for up to 48 hours after the procedure. It is safe to wear sanitary napkins or tampons.

The incisions are closed with **absorbable sutures**. They may be tender for a few days. You can get them wet after 24 hours (I.E.: a shower) but probably shouldn't soak them (I.E.: a bath) for 2 or 3 days. The sutures will come out within 2 weeks. If they are causing irritation, you or a helpful friend can remove them by cutting them on one side of the knot and pulling them out. The sutures are really not required to hold the skin together after 2 to 3 days. If you are not comfortable removing them, they can be left in until they fall out or a physician or nurse can remove them for you. If they are still present at your post operative visit and are bothering you, we will remove them for you in the clinic.

You may resume your **normal activity** as soon as you feel able. Many people are able to return to work the day after a laparoscopy. Everyone is different, and you should resume activities at your own speed. Sexual activity can be resumed as soon as it is comfortable.

Usually the physician who performed the laparoscopy will want you to make an **appointment 2 weeks** after the surgery to discuss the results and decide if any additional treatment is necessary.

Who will Perform the Laparoscopy

If you have been referred to S.O.F.T. by a gynecologist, we will as them to perform the surgery. If you have been referred to S.O.F.T. by a physician who does not perform laparoscopy, your procedure can be done by Dr. Martin or Dr McNaught. Sometimes, to expedite the timing of your laparoscopy we will have you discuss it with both clinic doctors so your surgery can be done by the one who has the first available surgical time. If you request, we can send you to another gynecologist or occasionally, in rare circumstances we will request your surgery be done by another physician.

© James S. Martin M.D.
S.O.F.T.
555 Southdale Rd., E., Suite 107,
London, ON, N6A 1A2
Tel: (519) 685-5559

Check out our web page at www.soft-infertility.com