# LAPAROSCOPIC SURGERY GENERAL INFORMATION

## WHY LAPAROSCOPIC SURGERY?

Laparoscopic surgery is performed predominantly for 3 reasons

Firstly because the abdominal incisions are small, usually 5 or 10millimetre diameter the recovery is much faster than with a traditional bikini line incision or a larger vertical abdominal incision. The average recovery for most laparoscopic operative procedures performed in this unit is usually 10-14 days as opposed to 6-12 weeks for open surgery. This allows faster early mobilisation and may lessen the risk of post operation thrombosis and because the wounds are smaller infection. The 3-4 small incisions needed may be cosmetically less obvious.

Secondly some lesions such as endometriosis under structures such as the ovary or behind the uterus may be easier to access and visualise laparoscopically. Some adhesions may be better divided by Laparoscopy.

Thirdly in some operations the risk of adhesion formation for some operations is less if the laparoscopic approach is used.

Not all operations can or should be done laparoscopically. Some operations are best done by open surgery. Very delicate operations such as tubal microsurgery are done with other forms of magnification and are mostly done as open operations. If there has been a history of major abdominal surgery, especially bowel surgery, then there is a greater risk of of bowel and vessel injury as structures may be stuck onto the anterior abdomen. This is not a complete contra-indication your surgeon may discuss the relative risk (there is also an increase in risk with open surgery). Operations that can be done vaginally do not require the same recovery as open surgery and are preferred for some conditions.

## WHAT DOES THE OPERATION INVOLVE

The procedure involves making a small incision (5mm) just below the umbilicus and inserting a fine needle through it. Carbon dioxide gas is blown into the abdomen to lift the abdominal wall off the pelvic structures. It creates a space between the abdominal wall and the bowel. This allows the laparoscope, a small fibre-optic telescope, to be safely inserted through the same incision into the abdominal cavity and decreases the risk of injury to bowel, bladder or blood vessel Occasionally alternative insertion sites are necessary.

We can then view the womb, ovaries and fallopian tubes through the telescope, and examine them. Usually a second puncture, just below the pubic hairline is used to insert a needle or rod, which allows us to lift structures and view the underside as well.

To check that the fallopian tubes are actually patent (open) a blue dye may be squirted through the cervix and in normal circumstances, this should travel through the womb and out of both fallopian tubes and this should be easily visualised through the telescope.

# RECOVERY AFTER LAPAROSCOPIC SURGERY

The wounds following laparoscopic surgery vary between 0.5-2cm depending upon the operation performed. Any operation that requires removal of an organ or piece of tissue will require at least one port large enough to allow extraction of the item from the abdomen. Often the abdomen is tender for 48 hours. Some people experience bloating until wind is passed. It is best to try and pass wind rather than retaining it. You should temporarily release yourself from social inhibition.

In the few hours immediately post surgery you may feel abdominal discomfort and you will be given pain killers either by the oral route or often by injection. This should settle and you should normally need only oral painkillers after 24 hours. You may feel shoulder tip pain. This is usually due either to trapped wind left after the Laparoscopy, which will reabsorb naturally over 48 hours, or occasionally fluid left in the abdomen. This latter fluid is designed to prevent adhesion formation. It takes about 3-4 days to re-absorb and you may feel the fluid moving about. Your abdomen may also be slightly bloated. You will be told if this anti-adhesion fluid has been used.

Usually you will be ready to go home after 4-6 hours. The operation may have been planned with an overnight stay in mind.

There is no need to limit activity or lifting after 48 hour 4-6 houirsrs. You may still feel a bit washed out. This depends upon the length of time you are under anaesthetic. Although you will not harm yourself with any activity your concentration may be affected and you may feel tired. You will need to decide whether it is sensible to take on any activity based on your ability to concentrate. For instance it would be inadvisable to drive for 36-48 hours after an anaesthetic of this nature.

The abdominal wounds are robust and there is no need to protect them by limiting activity. They are closed with a dissolving suture. You may find that if you try to lift anything heavy they might hurt. Be careful when lifting anything valuable (vases, children etc). This will not cause permanent injury however, or slow your recovery unless you repeatedly undertake the same movements (causing the pain).

You should be able to eat and drink the evening of your surgery. Sometimes you may not feel like eating but you should be able to tolerate fluids. It may take 2-3 days for your bowels to start moving but you should be able to pass wind much earlier than that.

Make sure that you have adequate time off work etc and that you are not going back too early. Usually 10-14 days is sufficient to recover from most laparoscopic operations. This does depend on the actual operation however.

You will be given pain killers on leaving hospital. Do take them regularly for the first 48 hours. You should not need stronger pain killers than either ibuprofen or paracetamol/codeine after that. If you cannot take these tablets then let the nursing staqff know and alternatives will be provided.

If you develop a temperature after discharge you should either contact your surgeon or your General Practitioner for advice. This is uncommon. If you develop stinging whilst passing urine then your General Practitioner will be able to send a sample and if necessary treat a urinary infection.

**RISKS**

Laparoscopy is a blind procedure. That is the initial insertion of the tube carrying the telescope into the abdomen is done from the outside and it is therefore not possible to see the internal structures. These tubes have points that are designed to retract or are blunt to minimize this risk. Some conditions increase the risk of complications. These include previous abdominal surgery, especially bowel surgery, a history of adhesions, severe endometriosis, pelvic infection, obesity or excessive thinness.

SERIOUS RISKS
The risk of bowel and major vessel injury with gynaecological laparoscopic surgery is between 0.5 and 3 per thousand cases. This compares favourably however with rates of 8.4 per thousand for abdominal surgery and 7.3 per thousand for vaginal surgery. This might require immediate repair by laparoscopy or open surgery however15% of these injuries may not be diagnosed at the time of the procedure (RCOG).
Failure to gain entry to the abdomen
Hernia at entry site
Death 3/100,000

Frequent risks
Wound bruising
Shoulder tip pain
Wound infection

A verbal summary of the result will be available to you on discharge, but if there were any abnormality found, a detailed discussion would be arranged at your next infertility clinic appointment.

updated 1-11-16 JSP