

# MINI LAPAROSCOPIC APPENDICECTOMY



**Author:**

Dr. Roberto Gallardo Díaz  
Dr. Héctor Sagastume


Members of the  
Minimally Invasive Surgery  
Group of Guatemala

The appendix is an organ located between the large and small bowel. This produces a protein which destroys bacteria that are called immunoglobulin, which helps to fight against the organism infection. However, its function is not essential. People who have undergone to an appendectomy have not increased the risk of suffering an infection. Other organs of the body assume such function when removing the appendix.



# WHAT IS A LAPAROSCOPIC APPENDICECTOMY?

**APPENDICITIS IS ONE OF THE MOST COMMON SURGICAL PROBLEMS. ONE IN TWO THOUSAND PERSONS HAS HAD AN APPENDICECTOMY IN SOME MOMENT OF THEIR LIVES.**



Appendicitis is one of the most common surgical problems. One in two thousand persons has had an appendectomy in some moment of their lives. The treatment requires a surgery to remove the infected appendix. The traditional way is that the appendix is removed through an incision in the right lower abdominal wall.

In most of the laparoscopic appendectomies surgeons proceed through three small incisions (each one measures between 6 and 12,5 mm approximately if it is done as a conventional laparoscopic surgery, and one of 12 mm in the umbilicus, and two of 2 or 3 mm if it is done by Mini Laparoscopic Appendectomy) while observing an enlarged image of the inner organs of the patient in a television of high degree of definition. The appendix is removed by the incision of the umbilicus which measures from 10 to 12 mm of diameter.



# ADVANTAGES OF THE LAPAROSCOPIC APPENDICECTOMY

Results may vary according to the procedure that is used and the general condition of the patient. The common advantages are:

- Less postoperative pain; in the case of Mini Laparoscopy it can be up to 50% less than the Conventional Laparoscopic pain.
- Shortens the hospital staying.
- It turns out in a faster return to the intestinal function.
- A faster return to normal activity
- Better cosmetic results; with Mini Laparoscopic Surgery the scars are almost invisibles.

**SCAR OF 2 MM AFTER THE MINI SURGERY.**



## ARE YOU A CANDIDATE FOR A LAPAROSCOPIC APPENDICECTOMY?

Although the laparoscopic appendicectomy brings many benefits it is possible that is not suitable for some patients. A non perforated appendix that is diagnosed in an early way can generally be removed by laparoscopic means.

It is possible that in said patients an open-pit procedure may be necessary, in which a bigger incision is used so that the infected appendix is safely removed. Anyway, the decision whether the appendicectomy should be laparoscopic depends on the surgeon. At the present time, in my opinion, all appendicectomies should be by laparoscopic technique since all of them can be performed in this way.

A LAPAROSCOPIC APPENDICECTOMY IS MORE DIFFICULT TO PERFORM IF THERE IS A SEVERE INFECTION OR IF THE APPENDIX IS PERFORATED.



# HOW IS THE LAPAROSCOPIC APPENDICECTOMY PERFORMED?

The words “laparoscopic” appendicectomy and “open-pit” describe the techniques that a surgeon uses to access to an inner surgical field. In most cases the laparoscopic appendicectomies begin in the same way. By means of a cannula (a narrow and tubular instrument), the surgeon accesses to the abdomen. A laparoscop (a small telescope connected to a video camera) is inserted through a cannula, which offers the surgeon an amplified wide view of the patient’s inner organs in a television screen.

Many additional cannulas are inserted in order to let the surgeon work inwardly and to remove the appendix. The whole procedure can be completed through cannulas or by extending one of the small incisions for the cannulas. It is possible that a drainage is set during the procedure. It will be removed before you leave the hospital.



# WHAT HAPPENS IF THE SURGERY CANNOT BE PERFORMED OR BE COMPLETED BY LAPAROSCOPIC MEANS?

In a small amount of patients the laparoscopic method cannot be feasible due to the impossibility of visualizing or manipulating the organs in an effective way. When the surgeon feels that is safer to turn the laparoscopic procedure into an open one it is not because a complication, but a sensible surgical decision. Among the factors that can increase the possibility that the procedures turns it into an "open-pit" includes:

- Severe infection / or an abscess
- A perforated appendix
- Obesity
- History of a prior abdominal surgery that caused a dense scar tissue
- Bleeding problems during the surgery

The decision of performing an open-pit procedure is determined by the criteria of the surgeon, either before or during the surgery itself. The decision of turning it into an open procedure is exclusively based on the patient's safety.

## WHAT TO EXPECT AFTER THE SURGERY?

After the surgery it is importante that the patient follows the instructions of his(her) doctor. Although some persons fell better after few days remember that your organism needs time to heal. The patient is encouraged to get up from bed the day after the surgery and to walk. This will help him(her) to decrease his(her) muscle pain, and also the risk of the clot formation in his(her) legs.

It is probable that the patient can return to his (her) normal activities in one or two weeks. Activities such as: taking showers, driving his (her) car, climbing stairs, lifting up things, working or having intercourse are included.

If your pain is extended or if the prescribed pain relievers are not producing relief, the patient should inform his(her) doctor about it. Call and ask for a medical control appointment before reaching the next two weeks after your surgery.

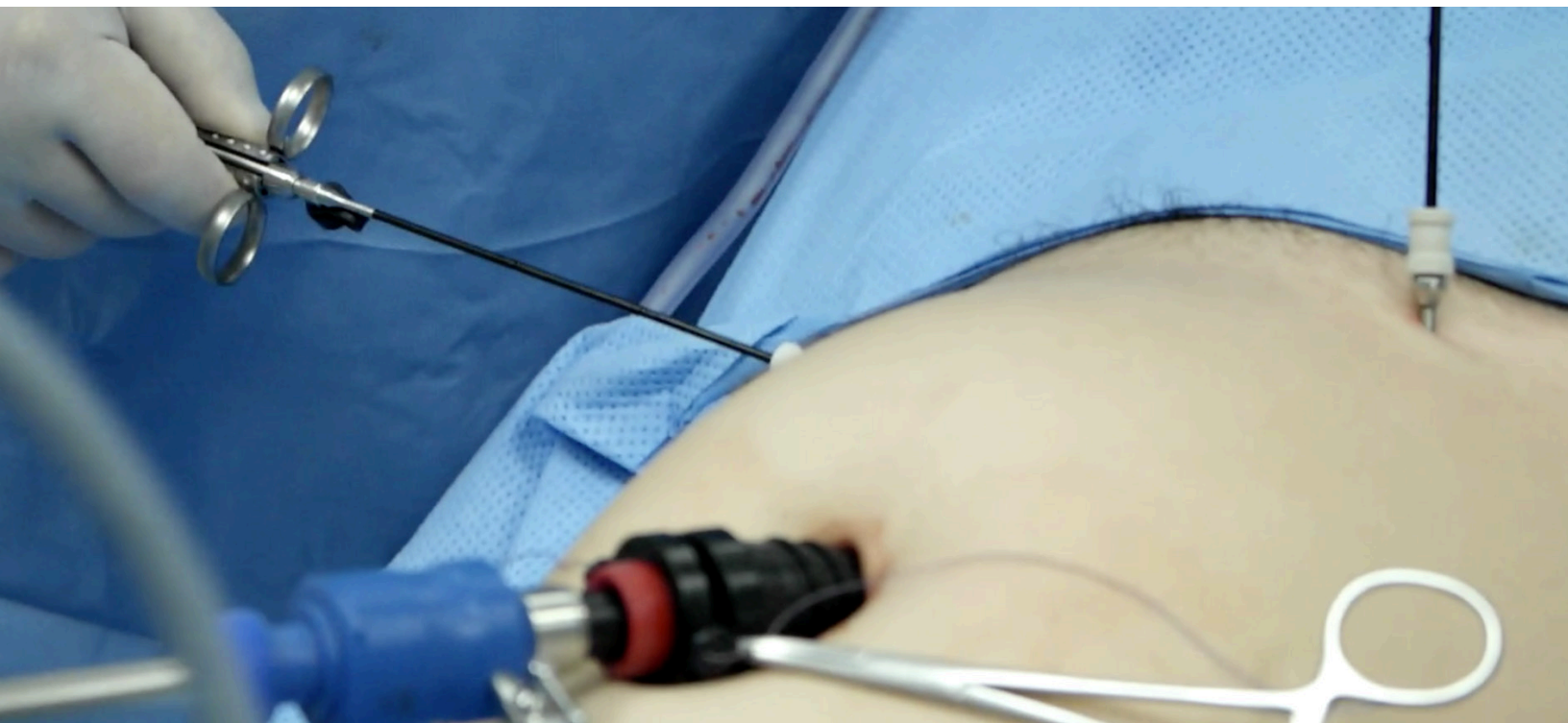


# WHAT COMPLICATIONS MAY OCCUR?

As in any surgery, there are risks that include complications. However, the risks that such complications may occur are not bigger than those when performing the surgery by the open-pit technique.

- Bleeding
- Infection.
- Surgical removal of an anormal appendix.
- The loss of the colon edge where the appendix was removed.
- Injury of adjacent organs such as small intestine, urethra and bladder.
- A blood clot to the lungs.

It is important that you recognize the early signs of possible complications. Contact your surgeon if you notice severe abdominal pain, fever, shivers or rectal bleeding.



# WHEN TO CALL YOUR DOCTOR

**Be sure to call your doctor or surgeon if any of the following symptoms are presented:**

- Fever above 101°F (39°C) that does not drop.
- Bleeding.
- Abdominal swelling that goes up.
- Pain that is not relieved with medications.
- Nausea or persistent vomits
- Shivers.
- Persistent coughing or short of breath
- Purulent drainage (pus) from any incision
- Redness around any of the incisions that worsen or gets bigger.
- Impossibility to eat or to drink liquids.

**This article does not pretend to replace the conversation with your surgeon over the necessity of getting an appendectomy but to clarify some concepts about the procedure and its feasibility by means of Mini Laparoscopic or Conventional Laparoscopic.**

**If you have any question referred to your necessity of getting an appendectomy, its alternatives, the invoicing or the covering of the insurance, or about the training and experience of your surgeon, do not hesitate in asking such surgeon or the personnel of the clinic about it. If you have questions over the surgery or the subsequent control, we ask you to talk about such subjects with your surgeon before or after the surgery.**