Laparoscopic appendectomy versus open appendicectomy

The two main surgical techniques include open and laparoscopic appendicectomy. In open appendicectomy, an incision is made through the skin, the underlying tissue and the abdominal wall in order to access the appendix. Laparoscopic appendectomy involves making three small incisions in the abdomen, through which particular instruments are inserted. A gas is gently pumped into the abdominal cavity to separate the abdominal wall from the organs. This makes it easier to examine the appendix and internal organs. (However, a laparoscopic appendectomy may sometimes need to become open surgery if:

- Extensive infection and/or abscess are present;
- A perforated appendix;
- A history of prior abdominal surgery causing dense scar tissue;
- Inability to visualize organs;
- Bleeding problems during the operation.

Once the appendix is accessed by either open or laparoscopic surgery, the blood vessels that supply it are clamped and the appendix cut and removed. In laparoscopic appendectomy, the appendix is removed through one of the small 'keyhole' incisions.

Advantages of laparoscopic appendicectomy:

- Less postoperative pain;
- May shorten hospital stay;
- May result in a quicker return to bowel function;
- Quicker return to normal activity;
- Better cosmetic results;
- Less wound infection;
- Less chance of hernias forming over time;
- Advantages are more pronounced in overweight patients;
- Other problems can be diagnosed during surgery and often managed as well i.e. pelvic infection, inflamed Meckel diverticulum, torsion of an appendices epiploicae;
- If the diagnosis is uncertain and the abdomen is diffusely tender, a diagnostic laparoscopy can be done. The problem found can often be managed laparoscopically. If for some reason a laparoscopy cannot be done i.e. medical aid refusing payment, a midline laparotomy will have to be done from the start because the diagnosis is uncertain.

What to expect after an uncomplicated appendicectomy:

After the operation, you can expect:

- Nurses will regularly record your temperature, blood pressure, pulse and respiration.
- Nurses will observe your wound and level of pain, and give you painkillers as ordered by your doctor.
- If there are no complications, you can get out of bed quite soon after the operation.
- Early movement is desirable, but caution is needed for climbing stairs so as not to strain the abdominal muscles. This will help diminish the risk of blood clots in your legs and of soreness in your muscles.
- You should be able to eat about 24 hours or so after the operation.
- You should be able to leave hospital one to two days after an uncomplicated appendicectomy.
- You will probably be able to get back to most of your normal activities in one to two weeks time. These activities include showering, driving, walking up stairs, working and engaging in sexual intercourse.
- If you have external sutures (stitches/clips), you usually have them removed after 10 days at a wound care clinic or your GP. An appointment will need to be made.
- The wound is usually covered by a waterproof dressing that should be kept on for 5 to 7 days. If the dressings become wet or soiled they should be changed. The wounds should be kept dry for at least two weeks.
- Sometimes, surgeons use dissolvable sutures.

Possible complications after an appendicectomy

- Bleeding;
- Wound infection;
- Intra abdominal infection or abscesses:
- Removal of a normal appendix;
- A leak at the edge of the colon where the appendix was removed;
- Injury to adjacent organs such as the small intestine, ureter, or bladder;
- Blood clot to the lungs.

If one of the following occurs you need to seek urgent medical attention i.e. call your surgeon, attend casualties, see your GP

- Persistent fever;
- Bleeding;
- Increasing abdominal swelling;
- Pain that is not relieved by your medications;
- Persistent nausea or vomiting;
- Chills;
- Persistent cough or shortness of breath;
- Purulent drainage (pus) from any incision;
- Redness surrounding any of your incisions that is worsening or getting bigger;
- You are unable to eat or drink liquids.



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