

Appendicitis

What is the appendix?

Appendix is a tubular organ attached to the first part of the large intestine called cecum. It lies in the right lower quadrant of the abdomen. The appendix is called a “vestigial” organ as it does not serve any useful function in the body. It can vary in its length from around 3cm to over 10 cm. In the centre of the appendix is a find lumen that is connected with the cecum. Normally, the lumen is only wide enough to admit a matchstick.

What is appendicitis?

Appendicitis is infection of the appendix. Usually this happens suddenly and is called acute appendicitis. The appendix commonly gets infected when its lumen is blocked. This causes the portion of the appendix beyond the blockage to get swollen and inflamed. As the appendix gets swollen, the blood vessels carrying blood to it and away from it are likely to get blocked. This causes gangrenous change in the appendix. Often, intestinal loops in the area as well as the omentum (a fatty curtain inside the abdomen) get stuck to an infected appendix in order to contain the infection in one corner of the abdomen. An inflamed appendix may burst inside the abdomen. Rarely, the appendix may get infected off and on and produce pain in the right lower abdomen from time to time.

How is appendicitis diagnosed?

When the appendix gets acutely inflamed the white cell (WBC) count may be raised. An ultrasound examination may show a thickened appendix with some fluid around it. Sometimes when the diagnosis of appendicitis is not clear the doctor may order a CT scan, which is the most sensitive test for diagnosing acute appendicitis. In patients who have repeated episodes of pain in the right lower side of the abdomen the appendix may or may not be the cause for it. Particularly in women diseases affecting organs like the ovaries or fallopian tubes may produce pain similar to that caused by appendicitis. In these patients laparoscopy provides the best way of assessment.

What is appendectomy?

The standard treatment for appendicitis is surgical removal of the appendix. The traditional open surgery requires a cut of around 5 cm – 10 cm for removal of the appendix. There are several disadvantages of an open operation. In obese patients or when a swollen appendix is hidden behind the intestines, the cut may have to be enlarged to reach the appendix. This type of a cut is likely to get infected, particularly if the appendix is badly infected or ruptured with pus in the abdomen. Sometime there are conditions affecting other organs like ovaries, tubes or intestines mimic appendicitis. At surgery if the appendix is found to be normal, the surgeon needs to check these other organs to find out the cause of the pain. Doing this by open surgery often requires enlargement of the cut.

What is laparoscopic appendectomy?

Laparoscopic appendectomy is performed through three cuts – a 1cm cut at the navel and two 5mm cuts in the lower abdomen. The surgeon passes tubes called “ports” through these small cuts. A telescope is introduced through one of them and two instruments through the other ports. The appendix is freed up, its junction with the cecum is ligated and it is removed via the port. As the cuts made for laparoscopic appendectomy are small, the chances of infection in them are reduced. Also, even if the appendix is hidden behind intestines, the surgeon is more often than not able to complete the operation using only three ports. This is true whatever the built of the patient – slim or obese. Also, the surgeon is able to survey all the other organs in the region, if required, in the eventuality that the appendix looks normal and is considered not to be the cause of the pain.

How is single incision laparoscopic appendectomy different?

In a single incision laparoscopic appendectomy, the surgeon makes only one incision inside the navel and places all three ports through this. The rest of the operation is completed in the same way as the laparoscopic appendectomy described above. In a small proportion of patients (around 5%) an additional port may be required if the appendix is very difficult to locate or dissect.

Can SILA be offered to all patients with appendicitis?

The surgeon would assess an individual patient to decide whether or not he / she are a suitable candidate for SILA. SILA may not be applicable to some patients, e.g.

- Those who are very obese,
- Those who have had multiple previous abdominal operations and
- Patients who are likely to have gangrenous or perforated appendix
- Traditional laparoscopic appendectomy, of course, can be offered to all these groups of patients.

What happens if an operation cannot be completed by SILA?

In 5% to 10% patients it may not be possible to complete the operation by SILA due to technical difficulties. The surgeon places one or two additional ports and completes the procedure in the traditional laparoscopic manner. Very rarely, it may be necessary to convert to an open operation. Both these issues are always discussed with patients prior to surgery and they are made aware that conversion to traditional laparoscopy or indeed to open surgery merely represents a sound judgment on part of the surgeon in the interest of patient safety.

What are the costs involved in SILA?

Using innovative techniques and indigenous instruments Dr Bhandarkar now offers his patients SILA at exactly the same cost as traditional laparoscopic appendectomy. So the patients can enjoy the benefits of this revolutionary surgery at no extra expense.

Advantages single incision laparoscopic appendectomy

- Less pain from the single, short incision after surgery
- Shorter hospital stay
- Shorter recovery time
- Faster return to normal diet
- Faster return to work or normal activity
- Better cosmetic healing (almost invisible scar)

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Disclaimer

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