

Endoscopy

Endoscopy is a medical procedure that allows a doctor to observe the inside of the body without performing major surgery. An endoscope (fibrescope) is a long, usually flexible tube with a lens at one end and a telescope at the other. The end with the lens is inserted into the patient. Light passes down the tube (via bundles of optical fibres) to illuminate the relevant area, and the telescopic eyepiece magnifies the area so the doctor can see what is there. Usually, an endoscope is inserted through one of the body's natural openings, such as the mouth, urethra or anus. Some endoscopies may require a small incision through the skin, and are usually performed under general or local anaesthetic.

Specially designed endoscopes are used to perform simple surgical procedures, such as:

- Tying a woman's fallopian tubes.
- Locating, sampling or removing foreign objects or tumours from the lungs and digestive tract.
- Removing the gallbladder.
- Taking small samples of tissue for diagnostic purposes (biopsy).

A range of endoscopes

Endoscopes have been developed for many parts of the body. Each has its own name, depending on the part of the body it is intended to investigate, such as:

- **Arthroscope** - inserted through a small incision to examine a skeletal joint.
- **Bronchoscope** - inserted down the trachea (windpipe) to examine the lung.
- **Colonoscope** - inserted through the anus to examine the colon (bowel).
- **Gastroscope** - inserted down the oesophagus to examine the stomach.
- **Hysteroscope** - inserted through the cervix to examine the uterus.
- **Laparoscope** - inserted through a small incision to examine the abdominal organs.

Medical issues to consider

Depending on the condition under investigation, some endoscopies can be carried out in the doctor's surgery. Others need a trip to hospital, and a few require a general anaesthetic. Endoscopies are generally painless, although they may still be uncomfortable for the patient. Compared with the stress experienced by the body in a full surgical procedure, an endoscopy is simple, low risk and cost effective. Other advantages include:

- No scar - if a natural body opening is used.
- A much smaller scar - if an incision is necessary.
- Quick recovery time.
- Less time in hospital. Often, no time in hospital is required as the procedure is performed in the doctor's rooms.

Prior to the endoscopy, your doctor will talk to you about your medical history including allergies and current medications. These factors can have a bearing on the operation.

Endoscopy procedure

The exact procedure used depends on the type of endoscopy and choice of anaesthesia. You may have local or general anaesthetic. If you have local anaesthetic, you can expect light sedation to help keep you relaxed and comfortable. The endoscope is inserted through a natural opening or small incision. The doctor may look at the area under investigation directly, through the endoscope, or view transmitted pictures appearing on a nearby monitor. The doctor may simply make a diagnosis, or could perform minor surgery at the same time. For example, a perforation may be stitched closed or a diseased organ (such as the gallbladder) removed. Alternatively, your doctor may take a sample of tissue (biopsy) for later analysis in a laboratory. Once the endoscopy is complete, the endoscope is removed. Any incision is sutured (sewn) closed.

Immediately after the endoscopy

After the endoscopy, you can expect:

- In most cases, you are kept under observation for just an hour or so.
- If you have been given general anaesthetic, you are monitored for much longer.
- Some types of endoscopy, such as laparoscopy, require an overnight hospital stay to make sure all is well.
- You are given pain relief, if necessary.
- You need someone else to drive you home, or else catch a taxi, because of the effects of medication during surgery.

Possible complications

Possible complications of endoscopy include:

- Perforation of an organ
- Excessive bleeding (haemorrhage)
- Infection of the incision
- Numbness at the incision site
- Allergic reaction to the anaesthesia.

Taking care of yourself at home

Self-care depends on the type of endoscopy you undergo. Be guided by your doctor, but general suggestions include:

- Most patients are able to resume normal activities within a few days to one week.
- If you have wounds, keep them dry and don't engage in any strenuous activity for about a week or so.
- See your doctor immediately if you experience any signs of infection at the incision site - symptoms can include redness, swelling, discharge and pain.

Long term outlook

Recovery time following endoscopy is rapid, usually a few days to one week or so. If your endoscopy involved an incision, post-operative pain should continue for no longer than a few days and the scarring should be minimal.

Alternatives to endoscopy

The main alternative to endoscopy is open surgery. Instead of accessing the body's natural openings or using a few small incisions, the abdominal cavity (for example) is opened using one large cut. The disadvantages of open surgery include:

- Longer hospital stay
- Increased risk of complications, including infection
- Longer convalescence (recovery time)
- Comparatively extensive scarring.

Where to get help

- Your doctor

Things to remember

- Endoscopy is a medical procedure that allows a doctor to observe the inside of the body without performing major surgery.
- An endoscope is a long, usually flexible tube with a lens at one end and a telescope at the other.
- Usually, an endoscope is inserted through one of the body's natural openings, such as the mouth, urethra or anus.
- Some endoscopies may require a small incision through the skin.

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Better Health Channel

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