Journal of Diagnostic Techniques and Biomedical Analysis.

Prospective

A SCITECHNOL JOURNAL

Applications of Endoscopy in various fields

Muhammad shaik*

Department of Gastroenterology, University of Munich, Germany

***Corresponding author:** shaik *Department of Gastroenterology, University of Munich, Germany*; Email: shaikmuhammad@gmail.com

Received: March 02, 2021; **Accepted:** March 18, 2021; **Published:** March 30, 2021

Description

Endoscopy is that the insertion of an extended, thin tube directly into the body to watch an indoor organ or tissue intimately. It can also be used to carry out other tasks including imaging and minor surgery.

Endoscopes are minimally invasive and may be inserted into the openings of the body like the mouth or anus.

Alternatively, they will be inserted into small incisions, as an example, within the knee or abdomen. Surgery completed through alittle incision and assisted with special instruments, like the endoscope, is named keyhole surgery.

Because modern endoscopy has relatively few risks, delivers detailed images, and is quick to carry out, it has proven incredibly useful in many areas of medicine. Today, tens of millions Trusted Source of endoscopies are administered annually.

Fast facts on endoscopy:

- Endoscopies are quick and relatively safe procedures.
- The first endoscope was designed in 1806.
- The main reasons for endoscopy are investigation, confirmation, and treatment.
- Endoscopy can be used to remove tumors or polyps from the digestive tract.
- Endoscopy is beneficial for investigating many systems within the human body; these areas include:
- Gastrointestinal tract: esophagus, stomach, and duodenum (esophagogastroduodenoscopy), small intestine (enteroscopy), large intestine/colon (colonoscopy, sigmoidoscopy), bile duct, rectum (rectoscopy), and anus (anoscopy)
- Respiratory tract: Nose (rhinoscopy), lower respiratory tract (bronchoscopy).
- Ear: Otoscopy
- Urinary tract: Cystoscopy
- Female reproductive tract (gynoscopy): Cervix (colposcopy), uterus (hysteroscopy), fallopian tubes (falloposcopy).
- Through a small incision: Abdominal or pelvic cavity (laparoscopy), interior of a joint (arthroscopy), organs of the chest (thoracoscopy and mediastinoscopy).

Endoscopy could also be wont to investigate symptoms within the gastrointestinal system including nausea, vomiting, abdominal pain, difficulty swallowing, and gastrointestinal bleeding. It is also utilized in diagnosis, most ordinarily by performing a biopsy to see for conditions like anemia, bleeding, inflammation, and cancers of the gastrointestinal system. The procedure can also be used for treatment like cauterization of a bleeding vessel, widening a narrow esophagus, clipping off a polyp or removing a far off object.

Application in other fields

- For non-medical use, similar instruments are called borescopes. Also see borescope
- The planning and architectural community use architectural endoscopy for pre-visualization of scale models of proposed buildings and cities
- Internal inspection of complex technical systems (borescope)
- Endoscopes are also a tool helpful in the examination of improvised explosive devices by bomb disposal personnel.
- The FBI uses endoscopes for conducting surveillance via tight spaces.

The main risks are infection, over-sedation, perforation, or a tear of the stomach or esophagus lining and bleeding. Although perforation generally requires surgery, certain cases may be treated with antibiotics and intravenous fluids. Bleeding may occur at the location of a biopsy or polyp removal. Such typically minor bleeding may simply stop on its own or be controlled by cauterisation. Seldom does surgery become necessary. Perforation and bleeding are rare during gastroscopy. Other minor risks include drug reactions and complications associated with other diseases the patient may have. Consequently, patients should inform their doctor of all allergic tendencies and medical problems. Occasionally, the location of the sedative injection may become inflamed and tender for a brief time. This is usually not serious and warm compresses for a couple of days are usually helpful. While any of those complications could occur, it's good to recollect that every of them occurs quite infrequently. A doctor can further discuss risks with the patient with reference to the actual need for gastroscopy.

Citation: *Shaik M (2021) Endoscopy. J Diagn Tech Biomed Anal 10:2.*