

# BIOMEDICAL ENGINEERING PROJECT:ANOSCOPE

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## 1 Introduction

### 1.1 What is an Anoscope?

An anoscope is a small,rigid,tubular instrument used in the procedure of angioscopy .It is also known as anal speculum.

### 1.2 What are it's uses?

An anoscopy is most often used to diagnose: :Hemorrhoids-A medical condition that causes swollen,irritated veins around the anus and lower rectum .They can be inside the anus or the skin around the anus. :Anal fissures-They are the small tears in the lining of anus . :Anal Polyps-Abnormal growth on the lining of anus is referred to as anal polyps. :Inflammation-The test can find the cause of abnormal redness and unusual redness,swelling and/or irritation around the anus. :Cancer-High resolution anoscopy is often used to look for cancer of the anus or rectum .The procedure can make it easier for your healthcare provider to find abnormal cells.

### 1.3 Why do we need to do an anoscopy?

If you have symptoms of an anus or rectum problem,you may require this test .Some are the following examples-: :Blood in your stool or on toilet paper after a bowel movement :Itching around the anus :Swellings or hard lumps around the anus :painful bowel movements

### 1.4 What happens during an Anoscopy?

During an anoscopy: :You will put a gown and remove your underwear. :You will lie on an exam table.You will either lie on your side or kneel on the table with your rear end raised in air . :your provider will gently insert a gloved ,lubricated finger into your anus to check hemorrhoids,fissures or other problems.This is known as digital rectal exam. :your provider will then insert a lubricated tube

called an anoscope about 2 inches in height into your anus. :Some anoscopes have a light on the end to give the provider a better view of anus and rectum area. :If your provider finds cells that do not look normal then he may use a swab or other tool to collect a sample of tissue for biopsy .High resolution anoscopy may be better than normal anoscopy for finding abnormal or defective cells.

### **1.5 What do the results mean?**

Your results may show a problem with your anus or rectum. These may include :Haemorrhoids :Anal fissure :Anal polyp :Infection :Cancer-The biopsy can confirm or may rule out cancer. Depending on the results, your provider may recommend more tests or treatment options.

### **1.6 Conclusion**

So we see that angioscopes have a vast utility and use in the medical field and further more newly invented techniques can be generated in the near upcoming future.