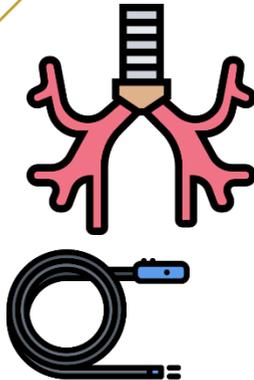




جامعة الإمام عبد الرحمن بن فيصل  
IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY

مستشفى الملك فهد الجامعي  
King Fahad Hospital The University

# Bronchoscope

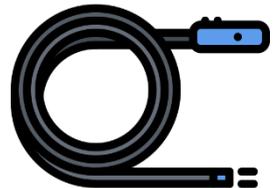


## What is Bronchoscopy?

Bronchoscopy is one of the crucial diagnostic and medical procedures that are used for diagnosis and treatment of many respiratory diseases

There are two types of bronchoscopy:

1. **Rigid endoscope:** It is made of a metal tube that passes from the mouth while patient is lying on his back, and it is performed under general anesthesia, and patient is ventilated through the endoscope tube.



## What is Bronchoscopy?

There are two types of bronchoscopy:

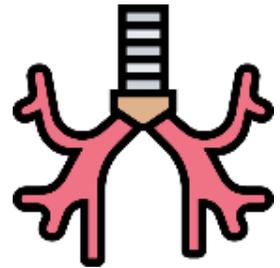
2. **Nerve endoscopes:** The periphery of the nerve fiber binoculars is smaller than the rigid binoculars and it comes in different scales. There are also small binoculars for children. These endoscopes are flexible and have optical fibers that transmit the bronchial image from the end of the endoscope into the cavity to the eye of vision or video. And it has a channel for the suction of fluids and secretions, and another channel for taking samples of tissues.

# What are the uses of a Bronchoscopy?

## 1- For diagnosis:

The rigid bronchoscopy and the nerve Bronchoscopy are used for:

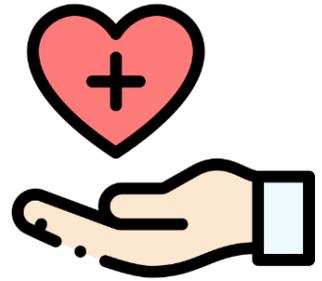
- Medical examination
- bronchial lavage
- Take samples using the brush
- Tissue eradication with needle-biopsy for test
- Tissue eradication with forceps-biopsy for test
- Ultrasound within the bronchi
- Optical kinematic diagnostics including drugs
- 3D navigation
- Thoracic endoscopy



# What are the uses of a Bronchoscopy?

## 2- For Therapy:

- Secretions suction
- Bronchial stents implantation
- Balloon dilation of the bronchi
- Therapeutic lavage
- Expelling foreign bodies from the bronchi
- Laser treatment
- Cryotherapy
- High frequency electrocoagulation
- Argon beamer treatment
- Brachytherapy
- Photodynamic therapy



## What are the process before Bronchoscopy procedure?

1. Review patient's medical condition and all his medications.



2. Fasting is required the night before the bronchoscope to prevent the entry of vomit into the lung in case of vomiting.



3. Intravenous nutrient is given to patient. If the patient is diabetic, it is preferable to adjust insulin doses before the bronchoscope.



4. Providing local anesthesia for the throat and upper respiratory tract, and the doctor may give a sedative intravenously or intramuscularly.



# What are the process during Bronchoscopy procedure?

- The Bronchoscopy is performed in the endoscopy room and in some hospitals in the critical care room or operation room.



- When the bronchoscopy is inserted through the mouth or nose, the patient is lying on his back, and it might be performed while the patient is sitting.

- Patient will be given oxygen through the nose, and the medical team will observe the pulse and the oxygen level in the blood.



# What are the process after Bronchoscopy procedure?

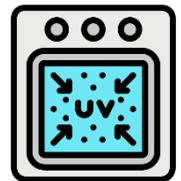
- Patient will be under observation for one to two hours after the bronchoscopy.



- Patient might be asked not to drive for 24 hours.
- Patient will be advised to avoid eating and drinking for four hours due to the effect of local anesthetic on the swallowing process, which may cause food or drink to enter the airway.



- After each operation, the endoscope is sterilized according to international procedures and standards.
- Bronchoscopy is examined periodically to make sure it is working well.





## What are the complications of bronchoscopy?

A tracheoscopy is considered a safe procedure, but in some rare cases complications such as:

- Tracheal spasm
- Bleeding
- Pneumothorax If biopsy is taken
- Decreased level of oxygen in the blood



## Sources and references

All pictures used are from the [flaticon.com](https://www.flaticon.com)

## Review and audit:

The content of this booklet has been reviewed by consultants of the  
Surgery department at King Fahad University Hospital

## Health Awareness Unit

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