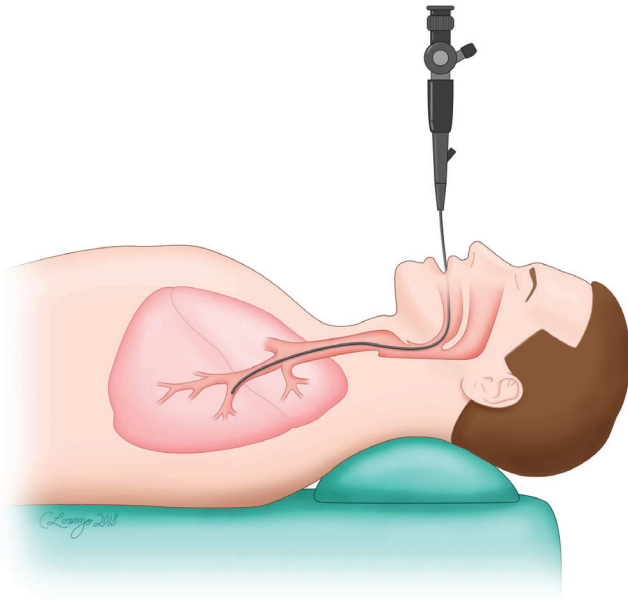


BRONCHOSCOPY



Bronchoscopy is a procedure that is performed to look at the air passages in your lungs with a small camera. It is done to visually inspect the airways or collect samples of mucus or lung tissue. The bronchoscope is a long flexible instrument that is inserted in the nose or mouth. It connects to a video screen for the doctors to view and take photos during the procedure. A bronchoscopy is commonly done as an outpatient and you often go home a few hours after you recover from the procedure.

This test can be performed for various reasons such as recurrent infections, abnormal findings seen on a CT scan such as lung nodules, to evaluate airway blockage, or to evaluate hemoptysis (coughing up blood). A chest x-ray or CT scan of the chest are frequently done prior to a bronchoscopy and help determine when a biopsy of lung tissue or inspection of the airways is needed for a diagnosis.

How to Prepare

You will not be able to eat or drink anything after midnight the night before the bronchoscopy. However, your doctor may want you to take some of your medications. Be sure to ask your doctor how to handle your daily medications on the morning of the procedure. You should not take any Advil, Motrin or similar medicine for 1 week prior to the procedure. If you are on Aspirin or any blood thinners please discuss this with your doctor.

What to Expect

When you arrive for your bronchoscopy you will be seen by the team of doctors and nurses participating in your procedure. The doctor will explain what will happen and possible risks prior to obtaining your signed consent. The nurse will go over your medical history and medication use. An intravenous line (IV) will be placed in your arm to deliver anesthesia and any medication needed during the procedure. If you are receiving general anesthesia you will be seen by the anesthesia team.

In the bronchoscopy room, monitors will be placed on you to continually check your blood pressure, heart rate and oxygen level during the procedure. Oxygen will be delivered throughout the bronchoscopy. You may receive numbing medication in your mouth and/or nose prior to the procedure to help prevent coughing and the sensation of gagging. Following this, you will be given anesthesia through the IV. The anesthesia medications used during the test make you drowsy. You will need a driver to take you home, since you will not be allowed to drive after being discharged.

After you are sedated, the doctor will insert the bronchoscope through your mouth or nose. Coughing during the procedure is common. A routine flexible bronchoscopy usually takes about 30-45 minutes. Advanced bronchoscopic procedures may take up to an hour to perform and are done with deep sedation or general anesthesia. Procedures such as endobronchial ultrasound (EBUS) or navigational bronchoscopy are useful tools in the staging and diagnosis of lung cancer and non-cancerous lung disease. When EBUS and navigational bronchoscopy are combined the procedure may take up to 90 minutes to perform.

After the procedure you will recover in a monitored setting. You may have an x-ray of the chest performed to evaluate for a pneumothorax (an air leak in the lung). It is normal to have a cough and you may even cough up blood following the procedure. You will be instructed when to restart your medications. You will follow up with your doctor for your results.

Understanding the Results

After the procedure, when you are more awake, your doctor may discuss the findings of the bronchoscopy and future healthcare plans with you. However, because of the effect of the sedation medications, you may not remember all the details. It is recommended to have the doctor speak to your family member or healthcare advocate regarding results and any treatment plan.

Results of biopsies or bronchial washings may not be available for one to four days. Occasionally additional tests may need to be performed which could take a week or longer before the report is finalized.

What are the risks associated with Bronchoscopy?

During the procedure your blood oxygen level may drop due to anesthesia and the bronchoscope being present in your air passages. The team will administer additional oxygen during the procedure and continuously monitor your oxygen level.

Coughing with specks of blood often occurs after the procedure. If you continue to have significant bleeding with blood clots after you return home you should call your doctor. A fever after the bronchoscopy is common and usually goes away without any treatment. However, an infection may rarely occur. This may manifest by persistent fever, cough with mucus, chills, and shortness of breath. Please contact your doctor if you experience these symptoms.

A pneumothorax is another rare complication that can occur when taking a biopsy of the lung tissue. This is when air escapes out of the lung and leaks into the surrounding space resulting in the lung not fully expanding. A chest x-ray is often done after the procedure to look for a pneumothorax. If it is small it may require hospital observation. However, if you are having significant symptoms (shortness of breath or chest pain) it may require a small chest tube to help re-expand the lung. This usually requires a hospital observation as well.

Additional resources:

https://www.cc.nih.gov/ccc/patient_education/pepubs/bronch_postcare_3swn.pdf

<https://www.uptodate.com/contents/flexible-bronchoscopy-beyond-the-basics>

<http://www.papworthhospital.nhs.uk/docs/leaflets/PI-109-Diagnostic-bronchoscopy-including-EBUS.pdf>

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