



Rocky Mountain Pediatric Pulmonology

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Helping your child...with inspiration!

Bronchoscopy

A fiberoptic bronchoscopy is a medical procedure that allows visual examination of the breathing passages of the lungs (called "airways") by placement of a viewing instrument, bronchoscope, into the trachea (windpipe) and bronchi (the main and smaller branches of the air tubes). This procedure allows the doctor to diagnose or to treat lung and airway problems.

There are two types of bronchoscopes. One type of bronchoscope is a soft, flexible fiberoptic tube. The second type of bronchoscope is a rigid, hollow, metal tube and it is typically used to remove foreign bodies obstructing the airways, typically by a surgeon or ENT physician.

During a bronchoscopy, the bronchoscope, a long flexible thin tube (thinner than a pencil), is placed in the nose or mouth, and then threaded down into the airways of the lungs. The tube has a very small lens at its tip, and is able to carry pictures back to a video screen or camera. A channel enables the doctor to introduce a small amount of fluid (sample washing or Broncho Alveolar Lavage BAL) into the lung and then remove it by suction. This is then sent to the laboratory for examination.

Prior to being scheduled for a bronchoscopy, it is extremely important to notify your doctor if your child is taking any medications that may interfere with your child's bleeding. It is important that you tell the physician about any prior reactions to sedatives or anesthetics that your child had had. Bronchoscopy can be done in a special procedure suite, in an operating room, or if needed in other areas of the hospital such as the intensive care unit. For this procedure, the doctor, a nurse, and a respiratory therapist are generally present. A bronchoscopy usually last about 20-30 minutes, though it usually takes longer for the doctor to complete the necessary orders.

WHAT HAPPENES DURING A BRONCHOSCOPY?

Your child will be asked not to eat after midnight the night before the procedure. In most cases, sedatives are used during the bronchoscopy. These generally consist of relaxing medicine given by intravenous (IV) before the procedure, which make your child drowsy. Often, the sedatives make your child forget what happened during the procedure.

During the procedure your child will be connected to a pulse oximeter, a small device clipped gently onto the finger that measures the blood oxygen level. Other monitors such as a blood pressure cuff or EKG are usually also used.

Before the bronchoscope is inserted, the back of your child's throat and nose will be numbed with a local anesthetic. These medications eliminate the gag and cough reflexes.

The bronchoscope will be placed into either the nose or the mouth, and then advanced slowly down the back of the throat, through the vocal cords and into the airways. Your child may have an urge to cough. Once the bronchoscope has

passed between the vocals cords, it is difficult to speak normally. The inability to speak will resolve after the bronchoscope is removed. It is important to remember that the oxygen level is monitored at all times through the procedure the doctor will examine the airway and may take samples of fluid after installing saline solution for the BAL.

COMPLICATIONS OF BRONCHOSCOPY

Flexible Bronchoscopy is a safe procedure. Complications are relatively infrequent and most often minor. Serious complications are uncommon. However there are some risks during the procedure such as bleeding from the nose or drop in oxygen level in the body, and after the procedure such as coughing, wheezing, infection and fever. If your child has asthma may experience wheezing or coughing and will need nebulizer treatments.

CARE AFTER THE PROCEDURE

- Your child will be monitored closely for two to four hours following the procedure
- Your child will not be allow to eat or drink until the effects of the numbing medicine have worn off and the normal gag reflux has returned
- Once at home your child may feel a mild sore throat, hoarseness, cough or tiredness. This is normal.
- Fever is common after bronchoscopy, especially when a BAL is done but it is usually low grade and last at most 24 hours. If fever persist for longer than one day or is higher than 102 call the doctor.
- Get medical help right away if your child has chest pain, shortness of breath, or coughs up blood.

Your doctor will give you preliminary results about the overall appearance of your airways right after the exam. Results of fluid samples take more time, often up to 2 weeks. Your doctor will go over these results at the next visit.

Please call us with any questions.

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