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### Flexible Bronchoscopy

(Airway Endoscopy)



To deliver intelligent and holistic medicine and to provide the best healthcare

"Compassion Quality Innovation Accountability"

All information above has been reviewed by Chest Medicine specialists

Edited and published by the Department of Nursing

Taichung Veterans General Hospital

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Flexible bronchoscopy, which also called airway bronchoscopy, is a visual exam of the airways. The exam is important for your doctor to see inside the airways, or to get samples of mucus or tissue form the lungs.

### Why do I need a bronchoscopy?

Common reasons include:

- ✓ **Infection**: sampling for identification of the microorganisms
- Lung spot(Lung nodule/mass): sampling for identification of the pathogen(such as, infection, cancer, or inflammation.)
- Airway blockage: to see the blockage and try to sample and/or remove the substance.
- Bleeding: may help find the cause of bleeding.



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# 1. Preparing for a bronchoscopy

- Electrocardiogram(EKG), chest radiography, and blood sampling will be arranged before the bronchoscopy.
- II. Not to eat, or not to be fed before the before the bronchoscopy.

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In a critically ill patient who has a breathing tube, feedings are stopped hours before the procedure to assure that the stomach is empty. The patient is given a small amount of medicine (a sedative) that causes sleepiness.

If you are having a bronchoscopy as an outpatient or as a non-critically ill inpatient, you will be told not to eat after the breakfast before (or about 4 hours before) the procedure. Please not smoking and removing any dentures before the procedure.

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- III. Right before the procedure, you may be given a medicine to numb your nose and throat area to make it more comfortable and help prevent coughing and gagging during the procedure. After that, you may be given a sedative by IV (in your vein). The sedative will help you to relax, and may make you sleepy. The sedative may also help you to forget any unpleasant sensations felt during the test.
- 2. What happens during a bronchoscopy?
  - Your doctor can explain what will happen during the bronchoscopy.

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If you are awake, he or she can talk you through it stepby-step. You will probably be lying down with the head of the bed tilted up slightly. The bronchoscope is placed through your nose or your mouth, then advanced slowly down the back of the throat, through the vocal cords and into the airways.

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- If a person has a breathing tube in place, the bronchoscope is passed through this tube.
- Your doctor will be able to see the inside of the airways as the bronchoscope moves down. You may feel like you cannot "catch your breath," but there is usually enough room around the tube to breathe and get enough oxygen. The doctor can also give you breaks during the procedure as needed.
- III. The length of the bronchoscopy varies depending on what needs to be done and why you need it. The doctor can give you an estimate, but it usually can last from 30 minutes to one and half hour.

#### 3. Risk of bronchoscopy

Bronchoscopy is a safe procedure. Serious risks form

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bronchoscopy, such as air leak or serious bleeding, are uncommon(less than 5%.) Other risks associated with the bronchoscopy include: discomfort and coughing, reduced oxygen, lung leak(pneumothorax, in large air leak, it may need to be drained with a chest tube), bleeding(esp. after a biopsy. Rarely, bleeding can lead to severe breathing problems or death), infection.

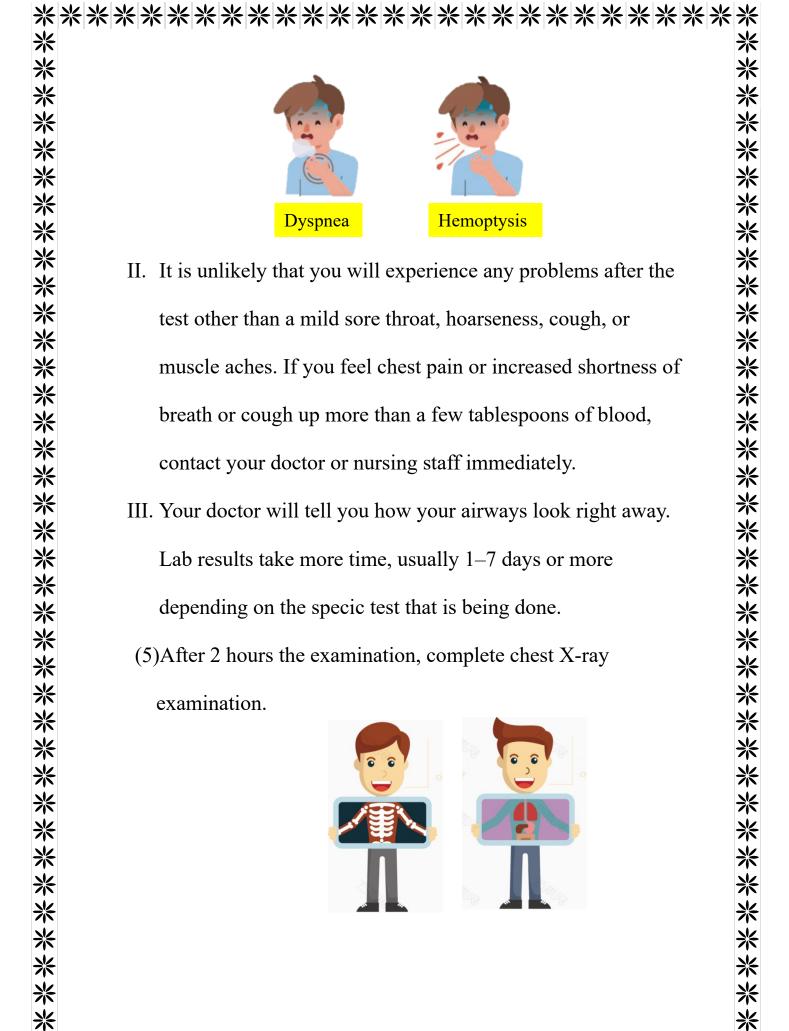
## 4. After the procedure

- Patient vary in how long it takes to wake-up with sedation.
  - If you are in the intensive care unit on a ventilator (breathing machine), you may already be sedated and will continue to receive medicines to keep you comfortable on the ventilator.

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- If you are an outpatient or a non-critically ill inpatient, you will need to wait(usually it takes 2 hours) until the numbing medicine wears off before drinking any liquids.
- If you are an outpatient, it is recommended that you bring someone along to drive you home.

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- II. It is unlikely that you will experience any problems after the test other than a mild sore throat, hoarseness, cough, or muscle aches. If you feel chest pain or increased shortness of breath or cough up more than a few tablespoons of blood, contact your doctor or nursing staff immediately.
- III. Your doctor will tell you how your airways look right away. Lab results take more time, usually 1–7 days or more depending on the specic test that is being done.
  - (5) After 2 hours the examination, complete chest X-ray examination.





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# 5. Conclusion

Please follow the instructions of your doctor and nurse to facilitate the smooth completion of the examination. After the examination, if you have symptoms of physical discomfort such as dyspnea or hemoptysis, you should inform the nurse.

6. Reference

Zhao Hengsheng, Qiu Zhaohua (2021). The role of interventional bronchoscopy in lung cancer. Journal of Clinical Medicine, 87(5),https://doi.org/10.6666/ClinMed.202105 87(5).0047

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Mohan, A., Madan, K., Hadda, V., Mittal, S., Suri, T., Shekh, I., Guleria, R., Khader, A., Chhajed, P., Christopher, D. J., Swarnakar, R., Agarwal, R., Aggarwal, A. N., Aggarwal, S., Agrawal, G., Ayub, I. I., Bai, M., Baldwa, B., Chauhan, A., Chawla, R., ... Venkatnarayan, K. (2023). Guidelines for endobronchial ultrasound-transbronchial needle aspiration (EBUS-TBNA): Joint Indian Chest Society (ICS)/Indian Association for Bronchology (IAB) recommendations. Lung India: official organ of Indian Chest Society, 40(4), 368-400. https://doi.org/10.4103/lungindia.lungindia 510 22

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※ ※ ※	Let's take the quiz to make sure you understand	※ ※ ※
<b>※</b>	** * * * * * * * * * * * * * * * * * *	※※
※※	○Yes ○No ○Don't know	米 米
<b>※</b>	2. Do not eat immediately after bronchoscopy?	米 米
米米	○Yes ○No ○Don't know	米米
米	3. After bronchoscopy, if there are no abnormalities before you can start eating,	米
※	you must drink water first and then eat directly.	米
<b>※</b>	○Yes ○No ○Don't know	米 米
米	4. A chest X-ray will be performed two hours after the bronchoscopy to confirm	米
<b>※</b>	whether there are side effects such as pneumothorax or hemothorax.	米米
米	○Yes ○No ○Don't know	米
<b>※</b>	5. You may experience sore throat and coughing up blood after bronchoscopy.\	米米
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