

Are There Any Risks Involved In This Procedure?

Inserting a microcoil is a very safe procedure. The most common risk is causing an air leak (pneumothorax) into the space between the lung and the inner chest wall. This may make you feel a bit short of breath and cause some chest pain or pain in your shoulder. You will be given oxygen for the shortness of breath, and pain medicine if needed. There is also a risk of the coil causing a little bleeding in your lung. If this happens you may cough up some blood. There is usually no need to treat either the pneumothorax or bleeding as you will be going for surgery shortly after the coil has been inserted.

What Are The Benefits Of Having This Procedure?

Using a microcoil makes it easier and more certain that the surgeon will find the small abnormal tissue in your lung.

Are There Any Alternatives To Having This Procedure?

Your doctor has recommended this procedure as being the best for you. If you have any concerns, please speak to your doctor.

Your Questions

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Microcoil-guided Lung Surgery

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This brochure tells you about microcoil-guided lung surgery. Your doctor will also answer any questions you may have.

What Is A Microcoil?

A microcoil is a small piece of very thin wire that has a fuzzy coating on its surface. The fuzzy coating on the coil prevents bleeding and gives the microcoil its other name, “*a fuzzy wire*”. The microcoil is used as a marker to help your surgeon find small areas of abnormal lung tissue (nodules) during surgery.

Who Will Be Inserting The Microcoil?

A specially trained doctor called a radiologist will insert the microcoil. Radiologists specialize in reading images such as x-rays or CT scans. They also specialize in doing procedures that are guided by x-rays or CT scans. The radiologist will explain the procedure to you and answer any questions you may have.

How Is A Microcoil Inserted?

The microcoil is inserted using CT scan images to ensure the coil is placed correctly. You will be awake during the procedure so that you can follow important breathing instructions. You will be asked to lie on the CT scanning table either on your back or front depending on where the nodule is located in your lung.

The radiologist will keep everything sterile. Your skin will be cleaned with antiseptic and you will have some of your body covered with a green towel. Your skin will be made numb with local anesthetic. Once the area is numb, a needle is inserted through the skin in between the ribs and into the nodule. The position of the needle is checked using the CT scan throughout the procedure. Once the needle is in the right spot the coil is placed and the needle is removed.

Will It Be Painful?

When the local anesthetic is injected it will sting but this soon passes and the skin and deeper tissues should then feel numb. You will feel a pushing sensation when the needle is being inserted and you may feel some pain briefly.

What Happens Afterwards?

After the procedure, you will be cared for in the CT scan recovery room until you go to the operating room for your lung surgery. You will be put to sleep with a general anaesthetic and your surgeon will remove the nodule and the microcoil along with a “wedge” of lung see Figure 1 The “Chest Surgery” booklet gives further information about your lung surgery.

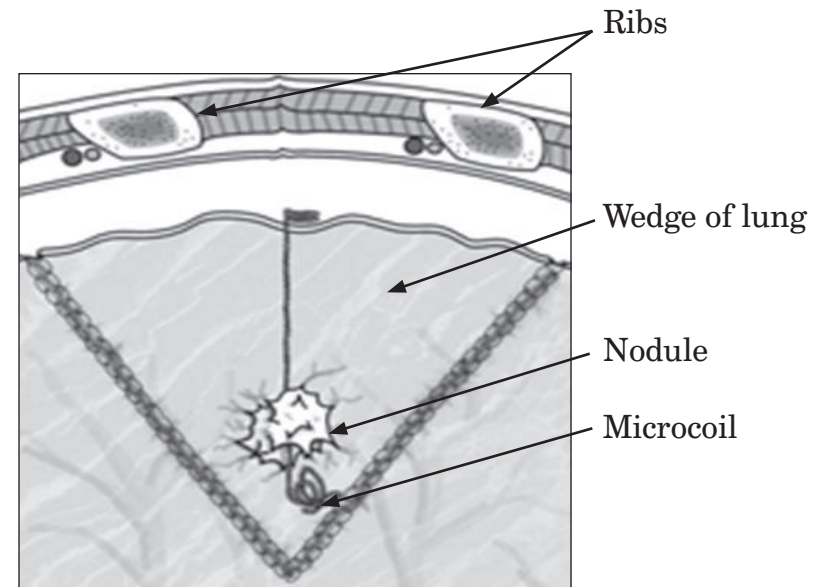


Figure 1

Mayo J R, Clifton J C, Powell T I, et al. Lung Nodules: CT-guided placement of microcoils to direct video-assisted thoracoscopic surgical resection. *Radiology* 2009;250:576-585.

When Will I Get My Results?

The surgeon will usually give you your results when you return to the office for your follow-up appointment. Sometimes you may be told your results before you go home from hospital.