Ask your physician about MITS

Determining which type of diagnostic procedure or treatment is best for your condition is a very important decision. That’s why it’s vital for you to consult with your physician about whether MITS is appropriate for you. Make sure all your questions about this advanced surgical approach are answered. Then, if you are a suitable candidate, you and your physician will discuss an individualized MITS plan that is right for your particular condition.

If your physician refers you to a board-certified thoracic surgeon for MITS, ask what type of experience the surgeon has (i.e., how many MITS procedures the surgeon performed and what types).

Be sure to speak openly with your doctor to determine which surgical options may be best for you or your family member.

benefit of MITS for patients with lung cancer is that it may allow chemotherapy to be used sooner and at more effective doses after surgery. In addition, one study suggests that immune function is better after MITS than after open surgery. More studies are being done to determine the long-term patient outcomes following MITS.

What makes a patient unsuitable for MITS?

There are certain conditions or patient histories that make open surgery more appropriate. Preexisting conditions that you may want to discuss with your physicians are:

- Large tumors or areas of disease
- Disorders that interfere with normal blood clotting
- Poor overall lung function if a lung needs to be removed (because one lung needs to be collapsed when removing the second lung)
- Treatment of cancer with chemotherapy or radiation before surgery

What are the Risks of MITS?

One complication of MITS can be prolonged leakage of air from the lungs. Occasionally the surgeon must convert a MITS operation into an open procedure because of an unexpected finding inside the patient’s body.
Instruments have been designed for use in MITS. These include:

- **Trocars**—a hollow tube inserted into the chest cavity, used to access the lung and allow for easy exchange of small surgical instruments

- **Thoracoscope**—a small camera that fits through a trocar and is used inside the chest cavity to view the body

- **Video monitor**—for providing a high-resolution, magnified view of the surgical site as seen through the thoracoscope

- **Endoscopic cutter/stapler**—which also fits through a trocar and is used for removing diseased tissue and repairing damage

In addition to reducing trauma associated with accessing diseased areas, MITS offers patients a number of other important medical advantages, compared with open surgery:

- **During surgery**—There is typically much less blood loss during surgery with MITS. There is also less exposure of other organs due to the smaller incisions.

- **In the hospital after surgery**—Many MITS patients are able to leave the hospital sooner, and most don’t require intensive care. There is usually less pain after surgery with MITS as well.

- **At home after the hospital stay**—In most cases, MITS patients regain the level of function they had before surgery sooner than patients having open surgery. This may include lung function as well as shoulder function, depending on where the surgery was performed.

### Faster Recovery

MITS patients often can return to work and other activities as soon as one week after their surgery. This contrasts dramatically with open surgery, which typically requires 4 to 6 weeks of recovery time. (Remember that it is very important to follow your surgeon’s specific instructions regarding your recovery.)

### Commonly Asked Questions About MITS

Most importantly, always speak with your physician first about whether MITS is right for you or your family member. Your physician can answer any questions you may have and, if MITS is the right option, he or she may refer you to a board-certified thoracic surgeon specializing in MITS.

Here are several common questions and answers that many patients have about this type of surgery.

### When is MITS used?

MITS can be used to take biopsies (samples of tissue in the body) to determine the presence of disease. It is also effective for removing diseased tissue or even an entire organ (such as a cancerous lung), as well as for treating certain traumas or painful conditions. Specific applications include:

- Diagnosis and removal of tumors in the lungs or chest cavity
- Treatment of collapsed lungs
- Evaluation and treatment of chest trauma
- Surgery on nerves to reduce excessive hand sweating
- Correction of spine deformities
- Reduction of pain sensation associated with certain diseases (such as chronic pancreatitis)
Are there surgical differences between MITS and open procedures?

The primary difference between MITS and open surgery is how the surgeon accesses the diseased area. Once this access is gained, the procedure itself is often quite similar for both types of surgery. Seeing the operation on a video monitor can also be an advantage with MITS, because it allows the surgical target to be magnified to provide an excellent view of details. Sometimes the length of the surgical procedure is shortened with MITS, but it can also be longer; the duration varies depending on the procedure.

Are surgical outcomes with MITS comparable to those with open surgery?

Most studies comparing MITS to open surgery have shown the results are very similar regarding the goals of the surgery. Some research, however, appears to have shown better results with MITS—especially regarding faster improvement in the patient's function and reduced postoperative pain.

When is MITS the right choice for the treatment of cancer?

As always, ask your doctor if MITS is right for you. MITS is often appropriate when cancer is at an early stage of development (Stage 1) and tumors are small. It is not generally used if the surgery is expected to be complicated (for example, due to the presence of a very large tumor, having had previous thoracic surgery, or having certain pre-existing medical conditions). There also should be no evidence of disease having spread to lymph nodes.

At some hospitals in the United States and around the world, MITS is routinely used to remove cancerous lung tissue and even remove an entire lung. These surgeries are more complicated than other MITS procedures, however, and not all MITS surgeons perform these procedures. One potential

MITS versus “Open” Surgery

The key difference between MITS—which is also known as video-assisted thoracic surgery, or VATS—and more traditional open approaches to thoracic surgery is how the surgeon accesses the part of the body requiring surgery. In many types of open surgery, the surgeon has to make a large incision in the chest, cut major muscles, and spread the ribs apart, potentially damaging surrounding nerves. For these reasons, open chest surgery may result in considerable postoperative pain. MITS, however, does not require rib spreading, and only small incisions (ports) are necessary. These ports allow insertion of a small camera (thoracoscope), along with specially designed surgical tools that are used to remove diseased tissue, drain fluids, and repair damaged areas.

Compared with open surgery, MITS results in far less trauma to the patient's body, while allowing the surgeon to perform a thorough, highly effective procedure. There are many other important benefits associated with MITS, described on the next page.