



Video Assisted Thoracic Surgery (VATS)

Less pain. Faster recovery. Effective results.



ETHICON ENDO-SURGERY, INC.
a Johnson & Johnson company



what is VATS?

What is VATS?

Video assisted thoracic surgery (VATS) is a major advancement in the treatment of many medical conditions, including lung cancer. It's a minimally invasive surgical method that allows thoracic surgeons (physicians who perform surgery in the chest cavity) to perform a procedure through small openings.

Every day, more patients are discovering the benefits of VATS. In fact, many complex medical procedures that formerly required traditional open surgery are now being performed using VATS.

The difference between VATS and open surgery

The key difference between VATS and traditional open surgery is the way the surgeon accesses the part of the body requiring surgery. In many types of open surgery, a large incision and other invasive measures are required that may result in a high degree of postoperative pain and discomfort.¹ On the other hand, VATS requires only a number of small incisions or *ports*. These ports allow the surgeon to insert specially designed surgical devices for removal of diseased tissue, fluid drainage, and repair of damaged areas.

A small video camera called a *thoracoscope* is also inserted into a port, allowing the surgeon to view the procedure on a video monitor. Viewing the operation this way allows the surgeon to magnify the image of the surgical target.

Compared with open surgery, VATS procedures cause less physical injury to the patient's body, while allowing the surgeon to perform a highly effective procedure.¹



important advantages

Other important advantages of VATS

In addition to greatly reduced incision size, VATS offers patients a number of other important medical advantages vs open surgery:

Surgery

- During surgery, there is typically less blood loss. Due to the smaller incisions, there is also less exposure of other organs in the body.
- VATS procedures may greatly reduce the total dose, duration, and administration of total anesthesia²

In the hospital after surgery

- VATS is associated with a significantly lower risk (70%) of overall postoperative complications³
- VATS procedures are associated with a significantly lower incidence (61%) of pulmonary complications³
- Patients may experience less pain after VATS surgery than typical open surgery patients because with VATS there may be no cutting or potential tearing of muscle⁴
- Many VATS patients are able to leave the hospital sooner, and most don't require a stay in intensive care⁴

At home after the hospital stay

- In most cases, VATS patients may regain their level of physical function sooner. This may include lung function and shoulder function, dependent upon what type of surgery was performed.^{5,6}
- VATS patients can often attend chemotherapy sessions, return to work, and resume other activities as soon as one week after surgery.⁴ Open surgery patients typically require 4 to 6 weeks of recovery time.⁴ Additionally, VATS may allow patients to receive a more effective dose of chemotherapy after surgery.⁷
- One study suggests that immune function is better after VATS than after open surgery⁸
- Another study found comparable 5-year survival rates for VATS patients with cancer compared with open surgery patients with cancer⁹



is it right for
YOU?

The use of VATS in lung cancer patients

VATS can be used to take biopsies (tissue samples from the body) to determine the presence of lung disease. It is also effective for removing diseased lung tissue (tumors) in the lungs or chest cavity.⁵ VATS is often used when cancer is in an early stage (Stage 1 or Stage 2) and tumors are small. As with any surgical procedure, surgery for lung cancer may present risks. Individual patient results may vary and are not indicative of all outcomes. Consult your physician to find out if VATS is appropriate for your condition.

Learn more about VATS

Learning which type of diagnostic procedure or surgical treatment is best for your condition is very important. Consult with your physician to determine if VATS is right for you. If so, you and your physician can discuss an individualized VATS plan that best suits your needs.

For more information, contact:

REFERENCES:

1. McKenna RJ Jr, Houck WV. New approaches to the minimally invasive treatment of lung cancer. *Curr Opin Pulm Med.* 2005;11(4):282-286.
2. Downey RJ, Cheng D, Kernstine K, et al. Video-assisted thoracic surgery for lung cancer resection: a consensus statement of the International Society of Minimally Invasive Cardiothoracic Surgery (ISMICS) 2007. *Innovations.* 2007;2(6):297.
3. Downey RJ, Cheng D, Kernstine K, et al. Video-assisted thoracic surgery in lung cancer resection: a consensus statement of the International Society of Minimally Invasive Cardiothoracic Surgery (ISMICS) 2007. *Innovations.* 2007;2(6):296.
4. University of Pittsburgh Medical Center. Video assisted lung and chest surgery. (VATS). (Online). Accessed June 19, 2007. <http://www.thoracicsurgery.medicine.pitt.edu>.
5. McKenna RJ Jr, Houck W, Fuller CB. Video assisted thoracic surgery lobectomy: experience with 1,100 cases. *Ann Thorac Surg.* 2006;81(2):421-425.
6. Li WW, Lee RL, Lee TW, et al. The impact of thoracic surgical access on early shoulder function: video-assisted thoracic surgery versus posterolateral thoracotomy. *Eur J Cardiothorac Surg.* 2003;23(3):390-396.
7. Petersen RP, Pham D, Burfeind WR, et al. Thorascopic lobectomy facilitates the delivery of chemotherapy after resection for lung cancer. *Ann Thorac Surg.* 2007;83(4):1245-1249.
8. Yim AP, Wan S, Lee TW, Arifi AA. VATS lobectomy reduces cytokine responses compared with conventional surgery. *Ann Thorac Surg.* 2000;70(1):243-247.
9. Downey RJ, Cheng D, Kernstine K, et al. Video-assisted thoracic surgery for lung cancer resection: A consensus statement of the International Society of Minimally Invasive Cardiothoracic Surgery (ISMICS) 2007. *Innovations.* 2007;2(6):298.

