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Minimally Invasive Medical Thoracoscopy

Patient Information Leaflet

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Your physician has recommended that you undergo a minimally invasive medical thoracoscopy for the following purposes:

1. to obtain further diagnostic information regarding your condition and clarify the cause of your respiratory symptoms.
2. to remove pleural fluid and prevent its recurrence

What is Minimally Invasive Medical Thoracoscopy (medical thoracoscopy)?

Medical thoracoscopy is a procedure used to examine the space between the chest wall and the lungs, known as the pleural cavity. It is performed using an instrument called a thoracoscopy—a small "telescope" that is inserted into the pleural cavity through a small incision (1–2 cm) made in the chest wall. This method allows for a detailed inspection of the pleural cavity, enabling the physician to identify the cause of fluid accumulation. The procedure typically includes the collection of biopsies and fluid samples through the thoracoscopy. In certain cases, it may be necessary to instill substances into the pleural space to prevent further fluid production—a process known as pleurodesis.

Before the examine procedure

- You must refrain from eating or drinking for at least 8 hours prior to the examination.
- You should discontinue any anticoagulant or antiplatelet medications you are currently taking, in accordance with the instructions provided by your physician.
- General anesthesia will not be administered; however, you will receive medications to help you relax or even sleep during the procedure.

Procedure Overview

Minimally invasive medical thoracoscopy (medical thoracoscopy) typically lasts between 40 to 60 minutes and is performed in a surgical suite.

You will be asked to lie on your side, with the affected side facing upward. A peripheral intravenous line will be placed to administer a mild sedative to help you relax, as well as analgesics to ensure you do not experience pain during the procedure.

The physician will apply a local anesthetic to the area of the chest wall where a small incision will be made to allow entry of the thoracoscopy. Once inserted, the thoracoscopy enables detailed inspection of the pleural cavity and the underlying lung. Biopsies will be taken using specialized forceps. If deemed necessary, substances may be instilled into the pleural space to prevent further fluid accumulation. The procedure concludes with the placement of a small chest drainage

tube to remove any remaining fluid and air from the pleural cavity.

After the Procedure

Following the procedure, you will be transferred to the ward for monitoring over the next few days, until the chest drainage tube is removed—provided no complications arise. The duration of tube placement depends on the continued production of pleural fluid but typically does not exceed 2–3 days. Your physician will monitor your condition both clinically and radiologically. Once the chest tube is removed and no further issues are present, you will be discharged home. A follow-up appointment will be scheduled approximately 10 days later, during which a new chest X-ray will be performed and the sutures from the chest wall incision will be removed.

What Are the Risks of the Procedure?

Minimally invasive medical thoracoscopy is generally a safe and well-tolerated procedure. The likelihood of complications is low, with the most common being mild pain at the incision site, which typically responds well to analgesic medication. Pain may be more intense and prolonged in cases where substances are instilled into the pleural space to prevent further fluid accumulation. Less commonly (approximately 1 in 100 patients), an infection may occur at the site where the chest drainage tube is inserted.

This can usually be treated effectively with antibiotic therapy. The chance of a more severe infection involving inflammation of the pleural space is extremely rare (1 in 500 patients) and may require intravenous antibiotics and possibly surgical intervention.

Equally rare is the risk of bleeding (1 in 1,000 patients), which is typically managed successfully during the procedure.

Are There Alternative Procedures to Medical Thoracoscopy?

An alternative method for examining the pleura is blind biopsy using the Abrams technique. However, its diagnostic value is significantly lower compared to minimally invasive medical thoracoscopy. It is a blind biopsy procedure associated with a higher risk of complications and bleeding, and it does not allow for pleurodesis.

The Pulmonology Clinic Department is equipped with the appropriate tools and possesses the necessary expertise to perform minimally invasive medical thoracoscopy as safely as possible.

Wishing you a successful procedure.