

Thoracentesis Information Sheet

General indications for the procedure:

Thoracentesis is procedure to remove fluid or air from the pleural space (space around the lung) for diagnostic or therapeutic purposes. This procedure is indicated when unexplained fluid accumulates in the chest cavity outside the lung. In more than 90% of cases, analysis of pleural fluid yields clinically useful information. If a large amount of fluid is present, then this procedure can also be used therapeutically to remove that fluid and improve patient comfort and lung function.

Description of Procedure:

The patient will be placed in a position that allows the doctor to easily access the fluid. Usually, the patient is asked to sit upright during the procedure. It is important to remain still during the procedure so that the fluid does not shift. The skin is cleaned with an antibacterial solution in the area where the needle will be inserted. After cleaning and preparing the skin for the procedure, a small amount of numbing medicine (a local anesthetic, similar to novocaine) is injected into the area. This medicine helps minimize discomfort during the procedure. A slightly larger needle is then inserted in the same location. A syringe is attached to this needle and is used to withdraw fluid from around the lung. Patients who have symptoms from the effusion (eg, shortness of breath) may have a large amount of fluid removed, which allows the lung to re-expand. The needle is removed and pressure is briefly applied to the insertion site.

Risks of the Procedure:

Complications include pneumothorax (air around the lung), hemoptysis (coughing blood) from lung puncture, re-expansion pulmonary edema or hypotension after rapid removal of large volumes of fluid, hemothorax (blood around the lung) from damage to blood vessels, puncture of the spleen or liver, and vasovagal syncope (fainting). Complications can usually be managed by placement of a large tube to evacuate air or blood.

Procedure Alternatives, if any:

Having the procedure done in the operating room with possibly a surgical incision and the need for general anesthesia to allow placing a camera into the pleural space to evacuate the fluid.

Probable Consequences of Refusing Procedure:

Not knowing the cause of the fluid accumulation and/or no relief of shortness of breath if present.

Person(s) Performing the Procedure:

The key portions of the procedure will be performed by a physician who is a member of the medical staff of Rush University Medical Center and/or a resident/Fellow. Fellows are licensed physicians in approved post residency training programs. Residents and interns are physicians in training at the institution. Parts of the procedure which they perform will be based on their level of competency.