Fine Needle Biopsy of the Lung

A fine needle biopsy of the lung is a procedure to obtain a small sample of the abnormal lung tissue with a small needle, which will be analyzed under a microscope. It is performed under X-ray or Computed Tomography (CT) guidance in the Medical Imaging Department.

This procedure is performed with the assistance of local anesthetic (freezing) injected into the skin, muscle and fat of the chest wall. The procedure is done using sterile preparation of the biopsy site.

The risks of the procedure include:

1. **Bleeding** - This is rare and may be local bleeding at the site of needle insertion or may be seen as coughed up blood. This happens in 0.05% of patients who have a lung biopsy.

2. **Infection** - We do our best to prevent this by performing the procedure under sterile technique.

3. **Pneumothorax** - This happens in 3/10 (30%). The lung develops an air leak after the needle is removed and the lung collapses like a balloon with an air leak. Usually this does not require treatment, but rarely the air must be removed from the space around the lung by inserting a small plastic tube to suck the air out and allow the lung to re-expand. This plastic tube is required in 1 - 5/100 (1 - 5%) of patients. If a plastic chest tube is inserted, you will have to be admitted to the hospital for one or two days.

Your doctor considers this procedure to be the safest and easiest way to acquire a sample of the abnormal lung. He or she is aware of the risks of this procedure and believe that the information to be gained out-weighs the associated risks.