

Supplementary material

Surgical procedure to perform the open lung biopsy

Under general anesthesia a regional nerve block with local anesthetic is performed, one space above and one space below the planned incision. Incision with cold scalpel (between the fourth and sixth intercostal spaces, according to previous localization) on the selected side, approximately 5cm long. Dissection with electroscalpel of subcutaneous tissue, muscle fascia, serratus anterior muscle, identification of external and internal intercostal muscles, which are dissected in the direction of their fibers. The parietal pleura is visualized and finger dissection is performed, in order to avoid injuries of the lung parenchyma when there is no single-lung ventilation that allows for lowering the lung before access to the thoracic cavity. The site for taking the sample is localized, selected lung tissue is taken with Foerster forceps. Lung tissue corresponding to the injury, considered to be enough for diagnosis, is cut with GIA mechanical suture (depending upon the brand, green Echelon 4.5 mm). The surgical piece is extracted.

The air leak test and hemostasis are verified. A number 30 French chest tube is left adjacent to the site of the resection, and is fixated to the skin. The wound is closed per anatomical planes.

The procedure had a total duration of 30 to 45 minutes approximately and the chest tube was removed one or two days after the procedure, checking for possible air leaks, when the drainage was less than 150 ml per day.