CT GUIDED TRANSTHORACIC BIOPSY OBTAINED WITH CORE BIOPSY TECHNIQUE: SAFETY AND SUCCESS OF THE PROCEDURE

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Percutaneous Transthoracic Biopsy (TTB) is a minimally invasive method of obtaining tissue specimens from a previously detected thoracic lesion for further analysis in order to reach a definite diagnose.

The study aimed at determining the role of percutaneous transthoracic biopsy in the light of current international recommendations for performing the intervention, and presenting our experiences - success rate, and complications.

The study included 57 patients (17 women and 40 men) of average 64.4 years, who underwent biopsy procedures from January 2016 to November 2019. The procedure was performed using the cutting biopsy technique, using an automated BARD MAGNUM Reusable Core Biopsy System with 14-18 G diameter needles, under the guidance of GE 16 and GE 64 MDCT, with a postprocedural scan for complication evaluation. The material was sent to the Pathology Clinic, Clinical Center Niš.

The procedure was successful in 53 patients (92.98%). Of the complications, pneumothorax was reported in 14 patients (24.56%), hemoptysis in 4 patients (7%), and intrapulmonary hemorrhage in 10 patients (17.54%). Only 4 cases of pneumothorax (7%) required drainage. The smallest lesion was 20 mm in diameter and the longest pathway through the lung parenchyma was 50 mm.

Based on our results, we can conclude that CT-guided transthoracic biopsy with core biopsy technique is a minimally invasive inexpensive procedure, with high rates of diagnostic accuracy, and acceptably low complication rates, and therefore one of the mandatory procedures to be considered in diagnosis of thoracic masses.

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