Abstract Group: 1.4. Interventional Pulmonology

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Title: Cryobiopsy versus forceps biopsy during semirigid thoracoscopy

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Body: Performing biopsies during semirigid thoracoscopy is often a difficult and time-consuming task due to the low mechanical power when using dedicated flexible forceps. Biopsies by cryoprobe could overcome these limitations. The purpose of this study was to compare the feasibility, size and quality of the specimens obtained by cryobiopsy with specimens obtained by flexible forceps. Fifteen patients with pleural effusion of unknown origin that underwent semirigid thoracoscopy were included. Biopsies were obtained using a flexible autoclavable cryoprobe 20416-032 (ERBE, Germany) 2.4 mm in diameter or flexible FB-55CD-1 Olympus forceps. Tissue samples were obtained from all 15 patients by forceps and from 14 patients by cryobiopsy, three with each technique per patient. The median size of the cryobiopsy sample was 17.1 (3.9–86.7) mm² and 9.1 (2.3-27.2) mm² of the forceps sample. Cryobiopsy samples were easier for interpretation (p = 0.003) than forceps biopsy samples. The amount of artifacts wasn’t statistically different between groups (p = 0.285). Diagnostic yield was the same by both techniques in patients, where both types of samples were obtained. There were no bleeding problems after the biopsies. Cryobiopsy during semirigid thoracoscopy appears to be an effective and safe new method for obtaining biopsy specimens from the pleural cavity. Cryobiopsy samples were bigger than samples, obtained by flexible forceps. The quality and diagnostic yield were comparable.