

Utility of Transbronchial Lung Cryobiopsy in Non-Interstitial Diseases.

Olivia Sánchez, Dina Martínez, Sebastian Fernandez, Berenice López, Carolina Perea, Rosa Rivera, Cesar Luna, Jose Martínez, Luis Flores, Patricio Santillán y Gustavo Reyes.

Abstract

BACKGROUND: Transbronchial lung cryobiopsy (TLCB), performed with a flexible cryoprobe, is an interventional pulmonology procedure that has proved its diagnostic value for interstitial pulmonary disease. However, it has not been explored extensively as a diagnostic tool for patients with non-interstitial lung pathology, including infectious and malignant diseases.

OBJECTIVE: To evaluate the diagnostic yield and safety of an interventional pulmonology approach that integrates TLCB and bronchoalveolar lavage (BAL) for the diagnosis of non-interstitial pulmonary disease.

METHODS: TLCB and BAL were performed under general anesthesia through the same bronchoscopic access on 103 adult patients (including immunocompromised HIV+ individuals) with clinical/radiological evidence of non-interstitial lung disease admitted to the Interventional Pulmonology Service between May 2015 and April 2016. Samples obtained were sent to pathology and microbiology laboratories for standard diagnostic analysis.

RESULTS: Samples of TLCB allowed the diagnosis of 75.7% of patients, while 39.8% were diagnosed from BAL. The global diagnostic yield from the dual sampling was 92.2%. TLCB allowed the diagnosis of 94.7% of cancer cases and 60.0% of infectious cases, while BAL samples identified 77.5% of infectious cases and 21.2% of malignant lesions. The incidence of complications was 4.9% with full recovery in all cases.

CONCLUSIONS: Simultaneous TLCB and BAL constitute a safe and useful diagnostic procedure for non-interstitial pulmonary disease, with a global diagnostic yield of 92.2%. Complementary advantages of samples obtained by each technique result in a robust diagnostic strategy for infectious and malignant disease in adults, including HIV+ individuals.