

TO CRYO OR NOT TO CRYO: CONCORDANCE BETWEEN SEQUENTIAL TRANSBRONCHIAL LUNG CRYOBIOPSY AND SURGICAL LUNG BIOPSY

American Journal of Respiratory and Critical Care / 2019



THE CLINICAL QUESTION

What is the concordance between sequential transbronchial lung cryobiopsy (TBLC) and surgical lung biopsy (SLB) in the histologic diagnosis and multidisciplinary assessment (MDA) of diagnosis and management in patients with ILD without a UIP pattern?

TAKE HOME MESSAGE

 This prospective study comparing blinded TBLC and SLB tissue samples from the same patients for the evaluation of ILD for the first time demonstrates poor concordance in terms of pathology results between the two sampling procedures.



- TBLC falls short of SLB for obtaining useful histological information and was not considered as equal to surgical lung biopsy.
- For those patients with unacceptable conditions for SLB, the trade-off between the supposed lower risks associated with TBLC and the casespecific consequences of diagnostic uncertainty require careful consideration.
- Controversy still exists based on previous and current data.
- More data and evidence needed.



BACKGROUND

The differential diagnosis of diffuse ILDs is broad, and data suggests that histological information is required in at least 30-40% of cases. Transbronchial lung biopsy (TLB) with conventional forceps obtains small-sized specimens, which can be limited by crush artifacts. Thus, diagnosis is obtained in only 20-30% of cases. Surgical lung biopsy remains the

current gold standard for obtaining adequate specimens, resulting in a histologic diagnosis in >90% of cases. However, less than half of potential patients are eligible due to the morbidity and mortality risks. TBLC is a relatively new technique that provides larger and better-preserved lung samples than TLB but with less risks than SLB. Studies have reported a diagnostic yield of 70-80% with TBLC. The main aim of this study was therefore to compare the concordance between sequential TBLC vs SLB in the histologic diagnosis and MDA of diagnosis/management of ILDs in patients without a definite usual interstitial pneumonia (UIP) pattern on chest HRCT scan.