

## **Early experience of endobronchial ultrasound-guided transbronchial nodal cryobiopsy: a case series from Sabah, Malaysia**

### **ABSTRACT**

Endobronchial ultrasound-guided transbronchial needle aspiration (EBUS-TBNA) is an established minimally invasive method for the diagnosis of benign and malignant conditions. Continuous efforts are underway to improve the material adequacy of EBUSTBNA, including the introduction of a new technique called EBUS-guided transbronchial nodal cryobiopsy (EBUS-TBNC). This method allows for the retrieval of larger and wellpreserved histologic samples from the mediastinum. We present a case series of four patients who underwent combined EBUS-TBNA and EBUS-TBNC procedures in our centre. All procedures were performed under general anaesthesia using a convex probe EBUS scope (Pentax EB-1970UK). Two patients were diagnosed with malignancy and two with benign disorders (silicosis and tuberculosis). In the malignant cases, both EBUS-TBNA/cell block and cryobiopsy provided a diagnosis but cryobiopsy yielded more material for ancillary tests in one patient. However, in the benign cases, there was discordance between EBUS-TBNA/cell block and cryobiopsy. Only cryobiopsy detected granuloma in the patient with TB (tuberculosis), and in the patient with silicosis, TBNC provided a better overall histological evaluation, leading to a definitive diagnosis. No complications were observed. This case series supports the potential diagnostic value of combining EBUS-TBNA and EBUS-TBNC, particularly in benign mediastinal lesions (granulomatous diseases), and in cases requiring additional molecular tests in cancer diagnosis.