

suggesting that bronchial wash did not add anything to the diagnostic sensitivity [figure 1].

Conclusion On the basis of these results, we would not routinely recommend send bronchial washes for cytology from EBUS procedures.

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P79

THE UTILITY OF ENDOBRONCHIAL CRYOBIOPSY IN THE MOLECULAR DIAGNOSIS OF LUNG CANCER

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Introduction and objectives Forceps biopsy is the standard bronchoscopic approach for endobronchial lesions, with a diagnostic yield of 76%.¹ Endobronchial cryobiopsy produces larger specimens with less crush artifact and increases diagnostic yield.² We assessed the utility of cryobiopsy in the initial diagnosis of lung cancer and determined its yield for molecular testing.

Method Prospective review of endobronchial cryobiopsies at a tertiary centre between August 2017-June 2018. Suspected lung cancer cases with a visible endobronchial component on CT thorax were streamed to cryobiopsy. Cryobiopsy via flexible bronchoscopy was performed using 1.9 mm cryoprobe and ERBOKRYO system under conscious sedation with midazolam and fentanyl. Mean dose of midazolam was 2.6 mg and Fentanyl 66.3 microgram. Data was collected on baseline patient demograph, number of biopsies, complications, final histology and molecular markers.

Results 28 cryobiopsies were performed for suspected lung cancer. Mean age 69.1 years, 54% (15/28) male with mean 2.4 cryobiopsy specimens. Overall diagnostic yield was 89.2% (25/28). Non-small cell lung cancer (NSCLC)=60.7% (17/28) of which adenocarcinoma 17.6% (3/17), squamous cell carcinoma 58.8% (10/17) and 23.5% (4/17) NSCLC not otherwise specified. Small cell lung carcinoma (SCLC)=17.8% (5/28), mucoepidermoid carcinoma=7% (2/28) and chronic inflammation=3.6% (1/28). Of the 3 non-diagnostic cryobiopsies; 1 underwent CT-guided lung biopsy and was NSCLC (squamous) and 2 were known NSCLC referred for molecular testing where tissue was inconclusive and did not alter management.

In 17 NSCLC patients, cryobiopsy was sufficient in providing tissue for molecular testing in 88% (15/17).

Complications; 64.2% (18/28) mild bleeding and 35.7% (10/28) had moderate bleeding with haemostasis achieved using cold saline and adrenaline.

Conclusion This is the first study that demonstrates the dual utility of first-line cryobiopsy in the diagnosis and molecular testing of lung cancer.

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P80

LOW RISK OF PNEUMOTHORAX AFTER ENDOBRONCHIAL/ENDOSCOPIC ULTRASOUND GUIDED TRANSBRONCHIAL ASPIRATION OF HILAR NODES

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Introduction Endobronchial ultrasonography/Endoscopic ultrasonography (EBUS/EUS) is playing increasingly pivotal role in the evaluation of patients with lung cancer as well as other pulmonary conditions. It is a safe procedure with a high diagnostic yield. The total incidence of all complications is 1%–1.5%. It includes pneumonia, mediastinitis, pericarditis, bleeding, pneumomediastinum and pneumothorax. Pneumothorax is a rare complication seen with this procedure. It can be caused either by direct lung injury from the biopsy needle or rupture of a pre-existing bulla due to severe coughing caused by the bronchoscopic irritation of the airways. The two main independent risk factors for pneumothorax during EBUS are emphysema and probe position. CXR is routinely done by the endoscopists following EBUS biopsy of hilar nodes to exclude pneumothorax. We performed a retrospective study to look into the incidence of pneumothorax post hilar node biopsy in our department.

Methods Retrospective analysis of all cases of EBUS/EUS in a single hospital from 2012 to 2016. Procedure notes were checked to identify patients who had hilar nodes biopsied. Chest x-rays were looked at on IMPAX for those with hilar nodes biopsy. Pneumothorax was excluded by visual scanning of the images as well as checking radiologist's report.

Results A total of 630 patients underwent EBUS/EUS between 2012 and 2016. 138 (21.9%) of these had hilar nodes (station 10/11) biopsied. 129 out of 138 (93.5%) had chest x-rays after the procedure. Not even a single case of pneumothorax was reported.

Conclusion Pneumothorax is a known but very rare complication of EBUS. Routine chest radiographs may expose patients to unnecessary radiations, therefore, need for chest radiography post-EBUS hilar nodal biopsy should be guided by clinical judgement.

Abstract P80 Table 1

	numbers	Percentage
Total EBUS/EUS	630	100.00%
Hilar node biopsy	138	21.90%
No hilar biopsy	492	78.10%
CXR post-hilar biopsy	129	93.48%
No CXR post-hilar biopsy	9	6.52%
Pneumothorax	0	0.00%