carcinoid. In all of LC diagnosed by EBUS-TBNA, staging was achieved in the same procedure (8.1% N0, 5.4% N1, 67.6% N2 and 18.9% N3). EBUS-TBNA showed a sensitivity of 86%, specificity of 88.9%, PPV of 97.4% and PNV of 57.1% for simultaneous diagnosis and staging in our setting.

Conclusions In our study EBUS-TBNA was useful to simplify the diagnosis and staging of LC, allowing both simultaneously in 77.1% of the patients and may be the preferred method for the initial approach after CT or PET/CT scan in this group of patients, in order to achieve faster diagnosis.

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THE ROLE OF EBUS-TBNA IN ISOLATED INTRATHORACIC LYMPHADENOPATHY IN NON-NEOPLASIC PATIENTS – A COMMON DILEMMA IN CLINICAL PRACTICE

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Background Malignant or benign diseases can cause isolated intrathoracic lymphadenopathy (ITLN), a common dilemma in clinical practice.¹ Our aim was to analyse differential diagnosis of isolated ITLN in patients undergoing EBUS-TBNA and to calculate its sensitivity, specificity, positive predictive value (PPV) and predictive negative value (PNV).

Methods Retrospective study of patients with isolated ITLN undergoing EBUS-TBNA for diagnosis, from August 2011 to April 2017. For non-specified granuloma, reactive or inconclusive LN by EBUS-TBNA, a definite diagnosis was established by other procedures or clinical, laboratorial and radiological follow-up of 18 months. Exclusion criteria: suspicion or history of cancer.

Results We included 58 patients with mean age of 53 years (SD=15), mostly female (56.9%). EBUS-TBNA diagnosed 21 (36.2%) granulomatosis, 15 (25.9%) reactive LN, 8 (13.8%) cancer and 4 (6.9%) other diseases. 17.2% (n=10) of cases were inconclusive by EBUS-TBNA and definite diagnosis was established by surgical biopsy (60%) and other bronchoscopic methods (40%). In granulomatous disease, EBUS-TBNA diagnosed mycobacteriosis in 23.8%, sarcoidosis in 4.7%, silicosis in 4.7% and 66.6% remained as non-specified granuloma. The definite diagnosis of these granulomas was made by other bronchoscopic methods (42.9%), surgical methods (21.4%) and clinical follow-up (35.7%). 73.3% of reactive LN (n=11) were subsequently confirmed by follow-up (91%) or mediastinoscopy (9%). 26.7% (n=4) of reactive LN resulted in tuberculosis (6.7%), sarcoidosis (6.7%) and neoplasia (13.3%) by others procedures or follow-up. EBUS-TBNA showed a sensitivity of 74%, 66.7% and 92.3%, specificity of 94.7%, 100% and 91.1%, PPV of 95.2%, 100% and 75%, and PNV of 84.4%, 92.6% and 97.6% for granulomatosis, neoplasia and reactive LN diagnosis, respectively.

Conclusions Isolated ITLN were mostly benign and reactive LN was the second most frequent cause. More than 70% of reactive LN by EBUS-TBNA were confirmed and the majority had no need for more invasive procedures. EBUS-TBNA showed to be a useful diagnostic procedure in isolated ITLN, with a great PPV, and its accuracy can be optimised by follow-up or minimal invasive procedures.

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PREDICTORS FOR PNEUMOTHORAX FOLLOWING CT GUIDED BIOPSY (CTGB) FOR LUNG MASSES

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Background CTGB is widely used to sample lung masses. One of the important complications is pneumothorax which could potentially lead to a prolonged hospital stay. The aim of the study was to examine the prevalence and potential predictors associated with pneumothorax following CTGB.

Methods We retrospectively reviewed CTGB data over a two year period (August 2014 to July 2016) for all patients who underwent CTGB. The data collected included age, sex, comorbidities, smoking history, spirometry, performance status, presence of emphysema, thickness, depth of the needle, size of the lesion and lobe of the lesion.

Results 227 patients underwent CTGB with an overall diagnostic yield of 93.8% (213/227). The incidence of pneumothorax was 61/227 (26.9%). Of the patients with pneumothorax, 8/61 (13.1%) needed chest drain insertion with a median hospital stay of 4.5±2.1 days. There was no difference in diagnostic yield between both pneumothorax and the no pneumothorax group. Overall 89.2% (190/213) of the positive biopsies were malignant while 10.8% (23/213) were benign. There was no difference in the performance status, severity of airflow obstruction or lobe of the lesion between groups. Binary logistic regression analysis showed the size of the lesion as a determinant of developing pneumothorax (p=0.022). The risk of developing a pneumothorax was 27.1% for a lesion ≤10 mm and 18.7% for a lesion ≤20 mm.

Abstract P40 Table 1

	No pneumothorax (n=166)	Pneumothorax (n=61)
Age (mean±SD)	71.3±9.8	69.2±10.3
FEV1% predicted	69.5±22.3	71.5±22.8
Smokers	145 (87.3%)	52 (85.2%)
Emphysema on CT	80 (48.2%)	32 (52.5%)
Needle depth (median±SEM) mm	8±1.9	11±1.9
Gauge of needle (median)	18	18

Conclusion The incidence of pneumothorax following CTGB was 26.9% but only 3.5% of all patients undergoing CTGB had a chest drain inserted for their pneumothorax. While CTGB is a safe procedure with a good diagnostic yield one