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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P39

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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P40

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

needs to be watchful of the risk of pneumothorax. The size of the lesion correlated with the development of pneumothorax with a smaller size associated with a higher risk.

P41 INDWELLING PLEURAL CATHETER OR TALC PLEURODESIS: WHICH SHOULD WE FAVOUR?

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Introduction Malignant pleural effusions (MPE) cause disabling symptoms often relieved by thoracentesis. Indwelling pleural catheter (IPC) insertion and talc pleurodesis (TP) are equally effective treatments¹ yet; current BTS guidelines suggest talc pleurodesis as the preferred method of fluid control² IPCs may reduce hospital bed-days and minimise the need for repeated pleural intervention.³

Aim To compare the impact of IPC and TP on length of hospital stay (LOS) and need subsequent pleural intervention. Complication frequency and survival rates were also measured.

Methods Retrospective review of Pleural clinic and electronic case note records of all MPE patients at our institution requiring TP or IPC insertion over an 18 month period (01/05/15–01/11/16).

Results A total of 73 procedures (46 TP, 27 IPCs) were carried out on 71 patients. Mean LOS was shorter in the IPC group (0.85 (0–7) days) than with TP (7.65 (2–36) days). 11 patients (24%) required further pleural intervention following TP (2 had repeat TP, 8 had an IPC and one patient underwent therapeutic pleural aspiration). One patient in the IPC group had a second procedure (2nd IPC placed – a patient with cognitive impairment cut his tube). There were no hospitalisations as a consequence of complications in the IPC patients; 2 patients required antibiotics for drain site cellulitis (7%). In the TP group, 3 drains fell out (7%); one patient had a pneumothorax. 52 patients (73%) had died at follow-up (until January 2017). Median (IQR) survival after IPC insertion was 62 (24–146) compared with 74 (23–153) days.

Conclusions Our findings support first-line use of IPC in patients with a symptomatic MPE. IPCs resulted in shorter LOS and reduced the need for subsequent ipsilateral pleural drainage. All patients necessitating definitive intervention for a symptomatic MPE should be offered the choice between IPC and TP.

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P42 ESTABLISHING AN INDWELLING PLEURAL CATHETER SERVICE FOR AMBULATORY MANAGEMENT OF SYMPTOMATIC MALIGNANT PLEURAL EFFUSION

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Introduction and Objectives We introduced our Indwelling Pleural Catheter (IPC) Service in 2015 to allow ambulatory management of patients with malignant pleural effusions (MPE). Our aim was to review data to establish our patient group, prognostic indicators, rate of autopleurodesis, complications and length of stay (LOS).

Methods Data was collected from Trust electronic records for patients who had IPC placement for MPE June 2015 – July 2017. In addition to patient demographics and outcomes, LENT prognostic score¹ (pleural fluid lactate dehydrogenase, Eastern Cooperative Oncology Group (ECOG) performance status (PS), neutrophil-to-lymphocyte ratio and tumour type), complications and LOS were analysed.

Results 54 patients had IPC placement, 32 (59%) female. Median age was 71 years (24–92). IPC placement by tumour type based on histopathology: mesothelioma 7 (13%), lung 17 (32%), haematological 1 (2%), breast 12 (22%), gynaecological 5 (9%), renal 1 (2%), other tumour types 11 (20%). Median ECOG PS 3. 59% patients died with median survival of 44 days (4–257). Death by tumour type: mesothelioma 6 (19%), lung 11 (34%), haematological 1 (3%), breast 5 (16%), gynaecological 2 (6%), renal 1 (3%), other tumour types 6 (19%). No recorded complications at insertion. Late infection rate 4/54 (7.4%). IPC removal for autopleurodesis 7/54 (13%), with timing of autopleurodesis occurring at 4–8 weeks 1 (14%), 8–12 weeks 3 (43%), ≥12 weeks 3 (43%). Median LOS=1 day. Patients reported a high degree of satisfaction with the service.

Conclusions Our IPC service has helped us offer a patient focused choice through the use of a validated prognostication tool. We have demonstrated that it is safe and effective, and supports admission avoidance. We believe an IPC service promotes cost and clinical effectiveness, through a more modern approach when managing patients with MPE.

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Abstract P42 Table 1 LENT prognostication score by tumour type

Combined LENT Score	Mesothelioma	Lung	Haematological	Breast	Gynaecological	Renal	Other
Low 319 risk days (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Med risk 130 days (57%)	7 (23%)	3 (10%)	0 (0%)	11 (35%)	5 (10%)	0 (0%)	5 (16%)
High risk 44 days (43%)	0 (0%)	14 (61%)	1 (4.5%)	1 (4.5%)	0 (0%)	1 (4.5%)	6 (26%)