involved in the procedure. Overall diagnostic yields were calculated for trainers compared to trainees for both manoeuvring the bronchoscope and needling. Diagnostic rates according to year of EBUS-TBNA for trainers vs trainees were also calculated. Mann-Whitney U test was used to check for differences in hit-rates for trainers vs trainees between the two components of the procedure, whilst Kruskal Wallis test was used to assess difference in diagnostic yield between 2011–2016.

Results 1083 patients underwent EBUS-TBNA with mean age 61 years (SD +/-14), 464 (43%) were female. The overall diagnostic rate was 88%, with 479 (44%) malignant, 212 (20%) granulomatous, 262 (24%) benign and 130 (12%) non-diagnostic. Trainees manoeuvred the bronchoscope for 577 (53%) and needled for 461 (43%) patients. There were no differences in diagnostic yields between trainers compared to trainees for manoeuvring [88% vs 88% (p=0.81)] nor for needling [88% vs 88% (p=0.84)]. There were also no significant differences in diagnostic yield between years (figure1).

Conclusion In our institution we can teach multiple trainees whilst maintaining high diagnostic yield in two operator EBUS-TBNA for both manoeuvring the bronchoscope and needling when one operator is fully trained.

REFERENCE

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P37 THE CLINICAL UTILITY OF RAPID ON-SITE EVALUATION (ROSE) IN THE DIAGNOSIS OF NON-MALIGNANT GRANULOMATOUS MEDIASTINAL LYMPHADENOPATHY FOLLOWING ENDOBRONCHIAL ULTRASOUND (EBUS)

J Capps, K Heyes, S Bailey, T Gorsuch, M Woodhead, D Shelton, D Rana, N Narine, H Al-Najjar. *Central Manchester Foundation Trust, Manchester, UK*

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Introduction EBUS guided trans-bronchial needle aspiration with ROSE ensures adequacy of specimen samples and provides preliminary cytological diagnosis. Few studies have explored the utility of ROSE in granulomatous mediastinal lymphadenopathy. This retrospective study looks to further assess the validity of ROSE in the setting of non-malignant granulomatous disease.

Methods We reviewed a prospectively maintained database of ROSE and laboratory cytology Results for all EBUS procedures performed during a 12 month period from 1 st January to 31 st December 2015 at our institute. We included all patients who had granuloma (including probable or possible granuloma) identified at ROSE or final cytology analysis, or both. We then reviewed clinico-radiological data to ascertain the final diagnosis and excluded those patients with malignant disease.

Results During the study period, 366 EBUS were performed, with granuloma identified in 51 patients. Three patients were found to have malignancy and were excluded therefore 48 were included in the final analysis. The final diagnoses for the 48 patients are shown in Table 1. Patients with TB were more likely to have at least one granuloma at ROSE (84%) than patients with sarcoidosis (67%). Patients with granuloma identified at ROSE had a slightly lower number of nodes sampled per patient compared to those with no granuloma at ROSE (mean 1.8 vs 2.4 nodes per patient). The positive predictive value of ROSE for granuloma in our

cohort was 100%, with a sensitivity of 71%. This is comparable to other studies.

Conclusions In our cohort of patients, ROSE had a high positive predictive value and a sensitivity of over 70% for the diagnosis of granuloma in non-malignant disease. Our Results suggest that with the use of ROSE fewer nodes are sampled which may reduce procedure time and potential complications. This study is limited due to the small sample size but supports the use of ROSE in this context. We plan to carry out further work with larger data sets, and to look at the characteristics of those subsequently diagnosed with sarcoidosis or tuberculosis.

Abstract P37 Table 1

Final diagnosis	Granuloma at ROSE		Granuloma at final cytology	
	N	%	N	%
Sarcoidosis	18	38	27	56
TB (all)	16	33	19	40
TB (culture positive)	5	10	8	17
TB (culture negative)	11	23	11	23
Reactive	0	0	2	4
Total	34	71	48	100

P38 EBUS-TBNA IN LUNG CANCER – CAN WE SIMPLIFY DIAGNOSIS AND STAGING IN A SINGLE PROCEDURE?

¹LM Santos, ²D Jaramillo, ²M Jacomelli, ²VR Figueiredo. ¹Pneumology Unit, Hospitais da Universidade de Coimbra, Centro Hospitalar e Universitário de Coimbra, Coimbra, Portugal; ²Respiratory Endoscopy Service, Pulmonary Division of Heart Institute (InCor), Hospital das Clínicas, Faculdade de Medicina da Universidade de São Paulo, Coimbra, Portugal

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Background Lung cancer(LC) is the leading cause of world-wide cancer-related deaths and its accurate diagnosis and staging is crucial to guide appropriate treatment and prognosis.¹ EBUS-TBNA is a minimally invasive standard procedure for staging that has proven to be useful in diagnosis too, allowing a complete characterisation of the disease in a single procedure and, thus, decreasing time-to-treatment.²

Aim To evaluate the role of EBUS-TBNA as initial technique for simultaneous diagnosis and staging in patients with suspected LC and calculate its sensitivity, specificity, positive and negative predictive values.

Methods Retrospective study of all patients with suspected LC in computed tomography(CT) or positron-emission tomography(PET)/CT submitted to EBUS-TBNA for simultaneous diagnosis and staging, from September/2011 to February/2017. Results of EBUS-TBNA were compared to surgical ones, when patients were subsequently submitted to surgery, or to clinical and radiological follow-up.

Results Patients included(n=62) had mean age of 68 years (SD=10) and 66.1% were male. Smoking history was present in 53.2% and history of extrathoracic malignant disease in 17.7%. Mean diameter of pulmonary lesions in CT or PET/CT was 37.2 mm(SD=21 mm) and in 64.5% of cases were associated to lymphadenopathy. 59.7%(n=48) of patients were diagnosed with LC, 77.1%(n=37) of them by EBUS-TBNA, 8.3(n=4) by other bronchoscopic methods at same time of EBUS and 14.6%(n=7) needed surgical biopsy. LC diagnosed by EBUS-TBNA were 59.5% adenocarcinoma, 16.2% squamous, 21.6% small cell and 2.7%