Abstract P148 Table 1 CCGs geographically situated next to UHSM. Data demonstrates patients expected according to disease prevalence, actual number of referred and their according percentages

CCG	Patients Referred	% of total sample (n=451)	Total Population	IPF Prevalence	Patient % of IPF
Trafford	37	8	230,259	52	71
East Lancashire	27	6	369,202	84	32
Stockport	31	7	296,812	67	46
Bolton	33	7	295,168	67	49
Oldham	11	2	237,316	54	20
Tameside and Glossop	35	8	235,817	54	65
Heywood & Middleton	14	3	224,572	51	27
Rochdale	14	3	220,472	51	27
Bury	10	2	211,275	48	21
Central Manchester	3	1	209,605	48	6
North Manchester	8	2	187,547	43	19
Blackburn	14	3	169,187	38	36
South Manchester	17	4	166,928	38	45
Salford	9	2	73,986	17	54

Conclusions Equality of access to specialist treatments for IPF remains a challenge. There is wide variation in the number of referrals to our specialist centre per patient population. The reasons for this disparity could be lack of detection of IPF, physician or patient factors. This presents a continued challenge for IPF management.

REFERENCE

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P149

DESCRIPTION OF A NATIONAL PULMONARY FIBROSIS COHORT IN SWEDEN

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Background Idiopathic pulmonary fibrosis (IPF) is a rare disease, and estimates of incidence and prevalence vary considerably by geographic region. There have been few studies of

patient populations with IPF in Sweden and here we describe the first national cohort of patients with pulmonary fibrosis.

Methods A retrospective longitudinal study with linked data-sets from Swedish population-based registers and electronic medical records from 2001–2017. Included patients had a registration of International Classification of Diseases, Tenth Revision (ICD-10) code J84.1, were aged ≥ 40 years and did not have a competing diagnosis after the initial J84.1 code; a diagnosis algorithm was used to refine the population for patients with IPF. This national cohort was based on linked patient-level data from national, population-based health registers.

Objectives To describe incidence of pulmonary fibrosis and clinical characteristics (comorbidities and concomitant medications) at diagnosis and at any time.

Results Cohort 1 included 17 244 patients with pulmonary fibrosis. Incidence of pulmonary fibrosis ranged from 10.4–15.4 cases per 100 000 per year between 2001 and 2015, with an incidence of 13.9 cases per 100 000 per year in 2015. Incidence increased with age and was higher in males. Patients had a mean (standard deviation [SD]) age of 74.6 (10.5) years at time of diagnosis and 62.5% were male. Clinical characteristics of these patients are shown in the table; patients had a mean (SD) Charlson comorbidity index of 1.4 (1.7).

Abstract P149 Table 1 Summary of clinical characteristics of patients with pulmonary fibrosis in Sweden (cohort 1)

Clinical characteristic	Variable	Patients with this characteristic, n (%)	
		At or within 1 year after diagnosis (n=17,244)	At any time (n=17,244)
Comorbidities	Ischaemic heart disease	3638 (21.1)	4338 (25.2)
	Other infections of airways	2664 (15.4)	6960 (40.4)
	Acid-related disorders	2394 (13.9)	3056 (17.7)
	COPD	2249 (13.0)	2845 (16.5)
	Angina	2233 (12.9)	2539 (14.7)
	Diabetes (types 1 and 2)	1471 (8.5)	1901 (11.0)
	Bacterial pneumonia	998 (5.8)	2954 (17.1)
	Myocardial infarction	612 (3.5)	2408 (14.0)
	Sleep apnoea	514 (3.0)	665 (3.9)
	Depression	429 (2.5)	547 (3.2)
	Anxiety	329 (1.9)	450 (2.6)
	Pulmonary hypertension	303 (1.8)	447 (2.6)
	Bronchitis	280 (1.6)	1146 (6.6)
	Peripheral vascular disease	259 (1.5)	313 (1.8)
Concomitant medications	Cardiovascular medication	7965 (46.2)	11 852 (68.7)
	Anti-coagulants/anti-thrombotics	6569 (38.1)	10 493 (60.9)
	Corticosteroids for systemic use	6086 (35.3)	10 307 (59.8)
	Acid-related disorders medication	5889 (34.2)	10 183 (59.1)
	Heart failure medication	5224 (30.3)	9250 (53.6)
	Cholesterol-lowering medication	3653 (21.2)	6451 (37.4)
	Anti-neoplastic and immunomodulating agents	1793 (10.4)	3688 (21.4)
	Oxygen	1218 (7.1)	2447 (14.2)

COPD, chronic obstructive pulmonary disorder

Conclusions Analysis of the first national cohort of patients with pulmonary fibrosis in Sweden has found slightly higher incidence rates of IPF than those of previous studies, though this may be due to identification of patients with IPF using ICD-10 code J84.1 ('other interstitial pulmonary diseases with fibrosis'). Though a diagnosis algorithm was used to refine the population for those with IPF, these criteria might not exclude all patients with non-IPF interstitial lung diseases. The frequencies of clinical characteristics in this population were broadly in line with those previously observed in patient populations with IPF.

P150 NECK AS MEDIASTINAL EXTENSION: DIAGNOSIS OF SARCOIDOSIS BY CORE BIOPSY OF CERVICAL LYMPH NODES

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Background Sarcoidosis is a multi-system granulomatous disease of uncertain aetiology. It is characterised by bilateral hilar lymphadenopathy. The diagnosis is best supported by the

histological evidence of non-caseating granulomas in the affected organ (s). The diagnostic procedures for histological confirmation are invasive and a less invasive approach to diagnostic pathway is warranted.

Objectives The utility of diagnostic value of neck ultrasound was retrospectively evaluated in this study. A histological diagnosis was made by ultrasound guided head and neck core biopsy to confirm clinically and radiologically suspected sarcoidosis.

Methods Following clinical assessment by a respiratory physician, 25 patients were referred for sonographic evaluation of the head and neck by a thoracic radiologist after CT scan in an attempt to avoid the use of more invasive and expensive tests such as endobronchial ultrasound (EBUS) and mediastinoscopy. Typically these patients had obvious mediastinal adenopathy +/-parenchymal lung disease, but not clinically apparent neck nodes. Where no cervical lymph node suitable for biopsy was seen, the parotid glands were evaluated and biopsied if deemed abnormal. Patients with no suitable lymph nodes and normal parotid glands were returned for consideration of other diagnostic techniques.

Results A diagnosis of sarcoidosis was made in all cases where a core biopsy of cervical lymph nodes (figure 1) was attempted (23 out of 25 patients). It is emphasised that the cervical lymph nodes in this series were not particularly enlarged, short axis dimensions being under 10 mm in the majority of cases biopsied, and that these sub-centimetre short axis lymph nodes did not have any specific sonographic appearances to mark them as pathological. Nevertheless histological examination revealed non-caseating granulomas in all cases. In a further two cases, where no neck nodes were seen, a histological diagnosis of sarcoidosis was made from biopsy of diffusely abnormal parotid gland tissue.

Conclusions Given the clear advantages of cervical diagnosis in terms of invasiveness and economy compared to mediastinal alternatives, it is suggested that where the expertise for core biopsy of normal sized cervical lymph nodes is readily available, the technique may be considered as a first line investigation for the diagnosis of sarcoidosis.

P151 THE ROLE OF BRONCHOALVEOLAR LAVAGE AND ITS QUALITY IN THE DIAGNOSIS OF INTERSTITIAL LUNG DISEASE

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Background Bronchoalveolar lavage (BAL) is a widely used diagnostic tool for suspected Interstitial Lung Disease (ILD) patients and is advocated in ILD guidelines.¹ We aimed to evaluate the quality of BAL sampling in the diagnosis of ILD compared to BAL guidelines.²

Methods Retrospective cohort study of all BALs performed in ILD at the University Hospital of South Manchester (UHSM) between January 2015 and November 2016. Electronic reports and histopathological cellular analysis were assessed for qualitative outcomes as per BAL guidelines.²

Results 416 patients' coded as BAL sampling. 95 (24%) were performed in the diagnostic strategy for ILD. The mean age was 58.9 (range 18–89). 36 (37.9%) were Female and 59 (62.1%) were male. 13 (13.7%) had lymphocyte count $\geq 15\%$,