technique training and PAAP. The development of an asthma care pathway that captures the essence of the NRAD quality indicators, together with staff training, is urgently required to ensure that EDs lead the way in reducing the morbidity and mortality associated with acute asthma presentations.

Funding Sponsorship for the audit was provided by Novartis.

REFERENCE

1 Royal College of Physicians. *Why Asthma still kills, The National review of asthma deaths. Confidential enquiry report*, 2014.

M9 A HIGH PREVALENCE OF OBSTRUCTIVE SLEEP APNOEA (OSA) IN THE SEVERE/DIFFICULT TO TREAT ASTHMA (SDTA) POPULATION

[1]SE Davies, [2]N Cachada, [2]A Turner, [2]S Wharton, [1]A Mansur. *[1]Birmingham Regional Severe Asthma Service, Heartlands Hospital, Birmingham, UK; [2]Respiratory Department, Heartlands Hospital, Birmingham, UK*

10.1136/thoraxjnl-2016-209333.451

Introduction An association between OSA and asthma has been demonstrated. The exact prevalence in the SDTA population is unknown.

Aim To determine the prevalence and predictors of OSA in the SDTA population

Methods All patients who attended a severe asthma regional centre between January 2013 and August 2016 with confirmed SDTA were asked to participate. All patients without a pre-existing OSA diagnosis had an overnight limited-channel sleep study. Patients underwent bioelectrical impedance measurements and completed the Epworth Sleepiness Score (ESS).

Results 72 patients consented and were included in the analysis. 69.4% (n = 50) had OSA. 33.3% (n = 24) had a pre-existing diagnosis of OSA and 79% (n = 19) of this group were receiving Continuous Positive Airway Pressure (CPAP). 36% (n = 26) had a new diagnosis of OSA. 31% (n = 22) had OSA excluded with a negative sleep study. Mild OSA (Apnoea Hypopnoea Index (AHI) ≥5–14.9) = 31.9% (n = 23), moderate OSA (AHI ≥ 15–29.9) = 16.7% (n = 12), severe OSA (AHI ≥ 30) = 4.2% (n = 3). AHI was unknown for 16.6% (n = 12) with pre-existing OSA receiving CPAP from a specialist centre.

The mean age was 47.7 years (18–73) and 72.2% (n = 52) were female. Mean Body Mass Index (BMI) was 32 (18.6–65.7). ESS was higher in the OSA group compared to the no-OSA group (11.0 vs 8.7, p = 0.091). The OSA group had significantly higher BMI (34.7 ± 8.00 vs 28.8 ± 9.62, p = 0.007) and body fat percentage (38.7 ± 12.37 vs 28.3 ± 14.03 fat%, p = 0.003) compared to the no-OSA group. The OSA group had a significantly higher incidence of hypercholesterolaemia compared to the no-OSA group (32.6% vs 8%, p = 0.0239). There was a higher incidence of diabetes (18.6% vs 8%, p = 0.0932), hypertension (27.9% vs 16%, p = 0.1643) and gastro-oesophageal reflux (60.5% vs 54.2%, p = 0.6189) in the OSA group. Blood eosinophil levels were significantly lower in the OSA group compared with the no-OSA group (0.23 ± 0.18 vs 0.39 ± 0.29 x10^9/L, p = 0.004).

Conclusion A significant prevalence of OSA was noted in this SDTA population. BMI, percentage body fat and hypercholesterolaemia were the strongest predictors of OSA. Patients with OSA had significantly lower blood eosinophil levels when compared to the no-OSA group. Alternatives to eosinophilic inflammation as a driver for severe/difficult to treat asthma should always be considered.

Symptom Assessment and Investigation of Lung Disease

M10 LIVING WITH RELAPSING POLYCHONDRITIS; A PATIENT AND CARER ENGAGEMENT EXPLORATION

[1]J Haines, [2]J Hull, [3]J Swaison, [3]T Clark, [1]R Niven. *[1]North West Lung Centre, University Hospital of South Manchester, Manchester, UK; [2]Department of Respiratory Medicine, Royal Brompton Hospital, London, UK; [3]Relapsing Polychondritis Support Group, National, UK*

10.1136/thoraxjnl-2016-209333.452

Introduction Relapsing polychondritis (RP) is a poorly understood rare condition in which recurrent bouts of inflammation affect the cartilage of the ears, nose, larynx and tracheobronchial tree. Prospective research is extremely limited and true prevalence data unknown. There are no identified optimal diagnostic pathways and treatment is not standardised. Seeking patient experience and opinion is invaluable to support and inform clinical and research strategies. We report the first known public involvement data relating to living with RP.

Method The RP patient support group hosted a patient engagement event to provide a reciprocal education environment for healthcare professionals, sufferers and their carers. A one-hour patient and carer focus group, aiming to identify key issues

Abstract M10 Table 1 Priority resource allocation for addressing themed issues of living with RP

RP Suffer (n = 13)			RP Carer (n = 9)		
Group defined theme	*Resource coins assigned (n = 52)*	*% resource (priority rank)*	*Group defined theme*	*Resource coins assigned (n = 36)*	*% resource (priority rank)*
Lack of understanding of health care providers	15	29 (1)	Pain	15	42 (1)
Loss of identify	10	19 (2)	Lack of understanding of health care providers	7	19 (= 2)
Breathlessness	8	15 (3)	Restrictions on planning ahead	7	15 (= 2)
Pain	7	13 (4)	Impact on relationships	4	11 (4)
Fatigue	5	10 (5)	Financial worry	2	6 (5)
General side effects	3	6 (6)	Frustration	1	3 (6)
Restrictions on planning ahead	2	4 (= 7)			
Impact on relationships	2	4 (= 7)			