Abstract P9 Table 1

Diagnostic Group	Number of Patients
MND	28
Cerebral Palsy	7
Congenital Muscle Disease	7
Cuff deflation	8
Other	9

ventilation service (HVS). This treatment can also be used to enable deflation of cuffed tracheostomies to facilitate weaning from ventilation. We report on the outcomes of intrasalary botox in our HVS.

Methods In 2015, we set up an intrasalary botox service for patients under our HVS. We used ultrasound guidance and injected submandibular gland (SMG), parotid gland (PG) or both.

Results 92 intrasalary botox procedures were performed in 59 patients.

Prior to treatment with botox, 32% of patients had received hyoscine and 76% had received glycopyrronium. Glands injected were, SMG (6.5%), PG (42.4%) and both SMG and PG (51.1%). The majority (98.9%) received the Dysport preparation with mean dose 273 Units (range 150–500 Units). 92% were USS guided. 63% of injections resulted in subjective improvement in symptoms, with 28% patients requesting repeat injections after a mean of 4.1 months.

Complications were angioedema (1%) and worsening dysphagia (2.2% following SMG injection).

One patient received salivary radiotherapy and one patient underwent SMG excision to avoid repeated injections.

Median survival following initial treatment was 27 months with 42% patients still alive at the time of writing.

Conclusions Intrasalary botox appears effective across a range of neurological conditions requiring LTV with few complications. 63% of patients noticed symptomatic improvement and nearly 30% opted for repeated treatment. Dysphagia may be a complication of SMG injection. A randomised controlled trial may help establish the evidence base.

REFERENCE

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P10 EXPLORING INFORMATION NEEDS OF PATIENTS WITH SEVERE CHRONIC OBSTRUCTIVE PULMONARY DISEASE REQUIRING HOME NON-INVASIVE VENTILATION

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Introduction The benefits of home non-invasive ventilation (NIV) in patients with chronic obstructive pulmonary disease (COPD), including association between compliance and outcomes, is becoming increasingly well evidenced. With other treatments for COPD, such as inhaled treatments, improved patient understanding and education has been positively associated with compliance. However, little is known about patients' understanding of NIV and how this may impact compliance with treatment.

Aim To explore patients' understanding of NIV and their information needs.

Methods A postal questionnaire exploring the understanding of home NIV through both quantitative and free text responses was sent out to all patients with COPD established on home NIV within a large regional service. Quantitative data were recorded and analysed in Excel and thematic analysis of qualitative data was undertaken.

Results 46% (90/197) of postal questionnaires were returned. Although 86% felt confident using NIV, 40% reported needing help (family support 83%, professional carers 17%). 92% stated that they knew how NIV helped them, yet free text explanations often highlighted a lack of understanding. Four key areas were identified using thematic analysis:-

Breathing and sputum: Patients reported that NIV helped by supporting their breathing, including 'regulating breathing rate', 'opening up airways' and 'expanding the lungs'. Some patients understood NIV worked by helping them to bring up sputum more easily.

Sleep: Some patients reported that NIV worked by helping them sleep, including improving morning headaches and disorientation.

Gases: Some patients described NIV reducing carbon dioxide (CO₂) levels by 'forcing' CO₂ out of their body and 'cleaning' CO₂ out of the blood. Others thought that NIV put oxygen into their bodies.

Information needs: Patients described not knowing enough about what to do when unwell; using their NIV machine and making changes to treatment. Patients reported that specific information resources such as a pamphlet (62%) or online resources (36%) would be beneficial.

Conclusions Amongst this cohort of patients we identified variable understanding of home NIV and a need for specific, patient-centred information. More work is required to fully understand the experiences and unmet information needs of this patient group, to inform development of information resources that meet these needs.

P11 A SURVEY OF COPD PATIENTS SELF-REPORTED SLEEP PROBLEMS

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Introduction Many patients with chronic obstructive pulmonary disease (COPD) report poor quality sleep. Sleep disturbance may be attributed to a range of factors including cough, wheeze, needing inhaler, snoring or anxiety. It is recommended that patients with poor quality sleep undergo further investigation through clinical interview/questionnaires and overnight sleep studies (McNicholas et al. 2019).

Methods An electronic survey was designed to explore the sleep issues experienced by people with COPD and whether they had discussed these with healthcare professionals. In May 2021, a national respiratory society promoted this survey over email and social media. The survey was advertised to people who had issues with their sleep and a diagnosis of COPD.

Results There were 330 survey responses: 292 had COPD. 96% of people with COPD reported issues with sleep. Symptoms reported: feeling unrefreshed (70%), nocturia (63%),

snoring (40%), choking (25%), apnoeas (20%), wheeze (32%) and insomnia (53%). Only 43% had spoken to a healthcare provider about their sleep issues and many added they were not given the support they needed. Only 16% had been diagnosed with obstructive sleep apnoea (OSA).

To further assess sleep problems, 62% said they would have been interested in a sleep study, 49% in questionnaires to further assess sleep problems. Of the 57% of respondents who hadn't spoken to their healthcare provider, 70% reported they would like to speak to someone about their sleep issues.

Respondents would regard a good outcome for sleep interventions as: better nights sleep (86%), feeling more refreshed (75%), having more energy (73%), and feeling less sleepy (60%).

Conclusions Despite the high prevalence of sleep problems self-reported in people with COPD, only 43% had sought healthcare professional input. Responses highlight possible underlying undiagnosed OSA in some. Patients with sleep issues want to discuss these further and are willing to undergo investigations. Future research could improve pathways to identify patients requiring sleep evaluation within routine COPD clinics.

REFERENCE

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P12 IMPLEMENTATION OF A COMPUTER GUIDED SLEEP CONSULTATION WITH AN INITIAL TECHNICIAN REVIEW ALLOWS EARLY CHARACTERISATION AND PRIORITISATION OF PATIENTS FOR MANAGEMENT

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Background The Liverpool Sleep Centre provides secondary and tertiary level services for sleep disorders. We recently introduced a computer guided consultation (CGC); the CGC has comprehensive, sleep guideline based, clinical decision support system (CDSS) algorithms embedded throughout and creates an Electronic Patient Record. The initial review is by a sleep technician; in proof of principle work, this was as effective as specialist sleep physician assessment. The system also has also a 'clinical dashboard' designed to highlight patients of concern and facilitate multi-disciplinary team management. We wished to examine the discriminatory value of

the technician review particularly in identifying those needing prompt management.

Methodology To confirm faced validity we reviewed the dashboard alerts in patients from March 1st to June 22nd 2021 following CGC implementation. 326 patients with suspected Obstructive Sleep Apnoea(OSA) were assessed using the CGC; 170 male, mean(SD) age 49.1 (14.1) years, BMI 35.9(9.3). The risk profiling of the patients was reviewed; 326 people had an initial consultation at the time of analysis 42 had incomplete sleep study data.

Results Of the 284 with sleep study results, average ESS was 10.5, mean(SD) AHI 18.7 (19.6). A diagnosis of OSA(S) was given in 196 (69%), 51 (16%) had normal polygraphy and in 37(13%) further review was advised. Regarding overnight oxygen saturations 173(61%) had an average < 94%, 98 had >20 minutes SpO2 < 90%. 132 had bicarbonate recorded with 49 ≥ 27mmol/L. There were 223 drivers, Group 1=212; Group 2=8; drivers reporting sleepiness when driving 26 of 223 (12%) (Group 1=24/212; Group 2=1; Provisional=1).

Conclusion The implementation the CGC with standardised consultations and dashboard management system resulted in the identification and prioritisation of sleepy drivers including 8 Group 2 (HGV) for prompt management. Twenty four people (8%) had definite evidence of obesity hypoventilation SpO2 <90% for > 20 mins and bicarb ≥ 27. Only 37(13%) were identified as needing further sleep specialist diagnostic review. The CGC approach in real life performs as was seen in the validation work. The approach increases the capacity and capability of a department by allowing safe delegation of a significant proportion of initial assessments.

P13 SYMPTOMS PREDICTIVE OF SLEEP DISORDERED BREATHING IN POST-POLIO SYNDROME

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Introduction Post-polio syndrome (PPS) can affect patients decades after initial polio-virus infection and is characterised by new slow onset neuromuscular weakness, fatigue and pain. Hypoventilation is a feature when respiratory muscle weakness occurs. We assess the relationship between symptoms of PPS to diagnosed sleep disordered breathing (SDB) in form of obstructive sleep apnoea (OSA) and hypercapnic respiratory failure (HRF) in a cohort of patients referred to PPS specific self-management education programme.

Abstract P13 Table 1

IPPS Variables	No SDB			OSA		
	B	χ^2	OR (95% CI)	B	χ^2	OR (CI 95%)
Pain	.045	.479	1.046 (.921-1.187)	-.015	.034	.985 (.844-1.151)
Atrophy	-.028	.052	.973 (.767-1.233)	-.106	.528	.899 (.675-1.198)
Temperature	.090	.192	1.094 (.732-1.633)	.005	.001	1.005 (.626-1.614)
Bulbar	-.332	5.857	.717 (.548-.939)*	.003	.000	1.003 (.726-1.387)

Multi-nomial logistic regression with HRF as reference population; *p<0.05