IMPLEMENTATION OF A COMPUTER GUIDED SLEEP SYMPTOMS PREDICTIVE OF SLEEP DISORDERED BREATHING

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

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

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

Background 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

<table>
<thead>
<tr>
<th>IPPS Variables</th>
<th>B</th>
<th>χ²</th>
<th>OR (95% CI)</th>
<th>B</th>
<th>χ²</th>
<th>OR (CI 95%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td>.045</td>
<td>.479</td>
<td>1.046 (.921-1.187)</td>
<td>-.015</td>
<td>.034</td>
<td>.985 (.844-1.151)</td>
</tr>
<tr>
<td>Atrophy</td>
<td>-.028</td>
<td>.052</td>
<td>.973 (.767-1.233)</td>
<td>-.106</td>
<td>.528</td>
<td>.899 (.675-1.198)</td>
</tr>
<tr>
<td>Temperature</td>
<td>.090</td>
<td>.192</td>
<td>1.094 (.732-1.633)</td>
<td>.005</td>
<td>.001</td>
<td>1.005 (.626-1.614)</td>
</tr>
<tr>
<td>Bulbar</td>
<td>-.332</td>
<td>5.857</td>
<td>.717 (.548-.939)*</td>
<td>.003</td>
<td>.000</td>
<td>1.003 (.726-1.387)</td>
</tr>
</tbody>
</table>

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

10.1136/thorax-2021-BTSabstracts.122

10.1136/thorax-2021-BTSabstracts.123