offered a group session for respiratory polygraphy with the CNS. Patients completed a short symptom questionnaire and Epworth Sleepiness Score. These measures allowed the Consultant clinic template to increase capacity from 6 to 9 patients (50% increase). Furthermore if CPAP is indicated set up is on the same day now as the CNS attends clinic too.

Results This new pathway improved RTT from a median of 121 days to 35 days. There was also significant improvement in diagnostic clinic outcomes from 18% to 88% (figure 1)

Conclusion Implementation of this new OSA pathway incorporating a symptom questionnaire and early diagnostic testing has enabled a significant increase in clinic capacity achieving an improvement in RTT of 70%. Earlier treatment commencement will also lead to quicker resolution of day time somnolence limiting the time during which patients must abstain from driving and the resulting negative impact on their livelihood and lifestyle. At a time when healthcare budgets demand more for less we have demonstrated the efficacy of this new pathway.

REFERENCE

1. <https://www.brit-thoracic.org.uk/document-library/clinical-information/sleep-apnoea/impress-service-specification-for-investigation-and-treatment-of-osas/>

Abstract P213 Figure 1 Days between referral and first seen date for all referrals to sleep clinic since April 2016.

P214

REMOTE MONITORING IN THE EARLY STAGES OF CONTINUOUS POSITIVE AIRWAY PRESSURE (CPAP) INITIATION IN OBSTRUCTIVE SLEEP APNOEA (OSA) ALLOWS EARLY DETECTION OF POOR COMPLIANCE AND MASK PROBLEMS

S Wordingham-Baker, J O'Reilly, N Duffy, P Plant, B Chakrabarti, S Craig, A Manuel. *Aintree University Hospital, Liverpool, UK*

10.1136/thoraxjnl-2017-210983.356

Background OSA is an increasingly recognised disease and successfully treated with CPAP. There are ever increasing demands on sleep services in the UK, in terms of provision, compliance and safety. One possible solution is the use of remote monitoring soon after CPAP set-up to determine usage patterns, residual apnoea-hypopnoea index (AHI) and mask problems. We have analysed our remote monitoring database to assess new patients with OSA set-up on CPAP.

Method Retrospective data was collected from patients with OSA commenced on CPAP from start of June 2017 for thirty days. All patients referred to the Aintree University Hospital

Sleep service had a cardio-respiratory sleep study and subsequently, if appropriate, referral for CPAP. All patients with OSA were commenced on a Resmed Aironse S10 device with humidification, using a predictive algorithm, and had an assessment for an appropriate interface. All data was collected with patient consent using Resmed Airview.

Results Data was available in 71 patients (male 70%) for at least two weeks within this time period. Mean CPAP usage was 5 hours 4 mins with 84.5% using full face masks. Mean Residual AHI was low at 8.5 with small numbers of residual central events recorded (Table 1). See Table for more details

Conclusion Remote monitoring provides a large amount of useful data which can potentially help improve CPAP provision in the UK. There is large proportion of patient with nocturnal hypoventilation, and despite effective treatment with CPAP, a group with a residual increase in AHI. Non-compliance and mask leak are identified issues and twenty patients used CPAP for less than an hour a night, with seven of those not at all. Remote monitoring allows early detection of non-compliance and an opportunity for earlier intervention to improve management in this patient group

Abstract P124 Table 1 Patient characteristics and effect of CPAP on OSA

Variable (Units)	n=71 Mean(SD)	Range
Age (years)	53.2 (12.4)	26–80
BMI (Kg/m ²)	36.8 (8.1)	24–65
ESS	13.0 (5.5)	2–23
Pre-treatment ODI (events/hour)	34.5 (20.0)	7.1–83.4
Pre-treatment AHI (events/hour)	36.1 (23.5)	5.7–104
Pre-treatment central events (events/hour)	2.5 (4.6)	0–23.9
Time spent below 90% SpO ₂ (%)	29.8 (26.3)	0–98.9
CPAP pressure (cm/H ₂ O)	9.6 (1.5)	6–14
Time used (hours: minutes: seconds)	05:04:15 (02:49:46)	00:00:00 – 09:33:00
Residual AHI (events/hour)	8.5 (10.7)	0–44.1
Residual Central events (events/hour)	1.0 (3.0)	0–20.1
Mask leak (litres/minute)	26.0 (24.6)	0–75.9

P215

CONTINUOUS POSITIVE AIRWAY PRESSURE (CPAP) VERSUS AUTO-CPAP (APAP) FOR THE INITIAL TREATMENT OF OBSTRUCTIVE SLEEP APNOEA SYNDROME: CLINICAL EFFICACY AND COST

M Mason, I Valero-Sanchez, J Archer, IE Smith. *Papworth Hospital NHS Foundation Trust, Papworth Everard, Cambridge, UK*

10.1136/thoraxjnl-2017-210983.357

Introduction and Objectives APAP has been shown to be an effective way of titrating CPAP levels. Systematic reviews have shown similar treatment effects for APAP and CPAP. APAP devices are increasingly used for outpatient initiation of CPAP and subsequent long term use. In this service evaluation we assessed the clinical effectiveness and cost implications of APAP pressure titration followed by switching to long term CPAP.

Methods We collected data on 93, newly diagnosed patients with OSAS, starting on PAP, at baseline and at a 3 months follow-up visit. Patients initiated on APAP in an outpatient setting were asked to return in 2 weeks' time to swap APAP for CPAP, set at average pressure estimated by APAP. The