interested in further information about HNS/nES, 2) if they would be willing to try HNS/nES, and 3) if they were to choose only one of the four listed treatments, which one would they prefer to use every night.

Results 162 patients completed the survey (81 males, mean age 52 (12) years, BMI 34 (7.3) kg/m^2, ESS 10.2 (6.0) points, FOSQ10 28.5 (8.1) points). The majority of the respondents (89.5%) had been diagnosed with OSA, with 95.4% of those being treated with CPAP. 91.3% of the respondents were interested in more information and were willing to try HNS/nES. Most respondents preferred the potential use of nES (56.7%), while 21.7% chose HNS, 17.8% CPAP, and 3.8% the MAD. There were no differences in the characteristics of the patients who preferred nES compared to those who preferred other treatments; however, a regression analysis showed that a low ESS score was a predictor of patients choosing nES ($p < 0.05$).

Conclusion Although the CPAP is the established treatment for OSA, most patients would prefer alternatives for long-term treatment. The majority of the respondents were interested in emerging technologies, with less sleepy patients more likely to choose less invasive treatment options.

P296 EFFECTIVENESS OF ADAPTIVE SERVO VENTILATION IN THE TREATMENT OF CENTRAL SLEEP APNEA

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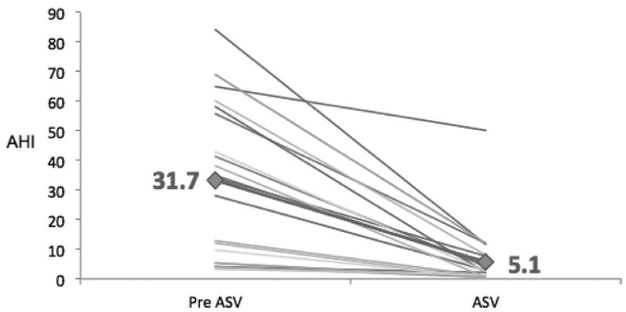
Background Adaptive Servo Ventilation (ASV) was developed to treat Central Sleep Apnea in patients with heart failure, which is usually associated with a low or normal PaCO2. The aim of ASV is to stabilise rather than increase overall ventilation. Evidence is limited regarding the use of ASV not only in heart failure patients but central sleep apnea of other aetiologies. The current study therefore explored this therapy in a regional sleep centre in the UK.

Method A retrospective review of the outcomes of 42 patients who were treated with ASV between January 2012 and December 2013, either following conventional positive airway pressure (PAP) or as an initial therapy. Measurements included the Apnea Hypopnea Index (AHI), compliance (measured by hours of machine use/night) and subjective sleep quality, pre and post ASV.

Results All patients demonstrated evidence of central sleep apnea with a reduced or normal transcutaneous CO2 during daytime spontaneous ventilation. Seven patients (16%) met the criteria for complex sleep apnea. 16 (38%) had evidence of heart failure whilst opioids were in use in six patients (14%). The majority of patients, (n = 36, 86%), were on PAP prior to ASV (mean duration 2.4 years), 22 patients (53%) were on Bi-level and 14 (33%) were on CPAP. Six patients (14%) had ASV as an initial therapy. The mean AHI improved from 31.7/h (range 2–84/h) to 5.1/h (Range 0–50/h) with ASV [Figure 1]. Compliance improved from 5.2 h/night to 6.4 h/night with ASV. 22 patients (52%) reported a subjective improvement in their sleep quality using ASV.



Abstract P296 Figure 1 AHI pre and post the use of ASV

Conclusion ASV appeared superior to traditional PAP in improving AHI, compliance and sleep quality for patients with central sleep apnea of various aetiologies.

From hospital to home: NIV in clinical practice

P297 EFFECT OF BTS-RECOMMENDED MEDICAL LEADERSHIP ON THE "DOOR-TO-MASK" TIME OF ACUTE NON-INVASIVE VENTILATION (NIV) SET UPS

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Introduction NIV is now part of standard acute care in the UK. "Door-to-mask" time has been discussed as a performance/quality indicator of acute NIV services [Mandal S *et al*. *Thorax*, 66(4). A117]. We compare the "Door-to-mask" time by analysing the "% of patients receiving NIV within 3 h" of diagnosis of acute hypercapnic respiratory failure (AHRF) at two acute hospitals in central England: Hospital A, which appointed a Lead NIV consultant in 2009–10 as per BTS recommendations and Hospital B without a Lead consultant. Both hospitals are run by the same Trust and on call physiotherapy teams, with comparable acute catchment sizes.

Methods The survey was approved as an audit by the Trust's Clinical Standards Committee. Data was taken from the acute NIV database, maintained continuously since 2004 at HospitalA and since 2009 Hospital B as part of a drive to maintain built-in quality. All acute NIV episodes between 01/10/2010–01/04/2011 (period 1) and 01/10/2012–01/04/2013 (period 2) were included: 458 episodes (27 excluded – incomplete data).

Results In period1, the "% of patients receiving NIV within 3 h" of diagnosis of AHRF were 69.9% at Hospital A and 69.49% at Hospital B. In period2, Hospital A improved to 82% with Hospital B at 71.1%. The most significant improvement, however, was in the reduction of variance around the median "Door-to-mask" time of 1.55 h at Hospital A and 1.83 h at HospitalB on the Probability Density curves, also seen over other periods outside the ones studied.

Conclusions The service at Hospital B did not show any measurable improvement in 'door-to-mask time' between periods1 and 2 but Hospital A did. As there were no significant differences like the demography, work load, frequency of on calls or number/grades of staff between the periods 1 and 2, this improvement could be a reflection on the role of a Lead NIV consultant at Hospital A as per BTS recommendations. Furthermore, reduction of variance around the median "Door-to-mask" time is observed to be a consistent feature of the improvement, which