

European Respiratory Society Annual Congress 2013

Abstract Number: 5322

Publication Number: P2031

Abstract Group: 4.2. Sleep and Control of Breathing

Keyword 1: Sleep studies **Keyword 2:** Sleep disorders **Keyword 3:** No keyword

Title: Validation of the STOP-BANG questionnaire as a screening tool for sleep apnoea in patients undergoing ablation for paroxysmal atrial fibrillation

Dr. Marcus 32147 Pittman marcus.pittman@nhs.net MD ¹, Dr. Martina 32148 Mason martina.mason@papworth.nhs.uk MD ¹, Ms. Danielle 32149 Packer danielle.packer@papworth.nhs.uk ¹, Ms. Rebecca 32150 Chadwick rebecca.chadwick@papworth.nhs.uk ¹ and Dr. Timothy 32151 Quinnell tim.quinnell@papworth.nhs.uk MD ¹. ¹ Respiratory Support & Sleep Centre, Papworth Hospital, Cambridge, United Kingdom, CB23 3RE .

Body: Background Patients with treated obstructive sleep apnoea have greater success compared to those untreated, when undergoing ablation for atrial fibrillation (AF) (Patel Circ Arrhythm Electrophysiol 2010: 445-51). The STOP-BANG questionnaire has not been validated in AF patients. We present preliminary results from a study examining its predictive value in this group. Methods Patients with paroxysmal (P)AF due for ablation were recruited, completed the STOP-BANG and underwent overnight oximetry. Sleep apnoea was defined as a 4% oxygen desaturation index of >5/hr. A sleep physician assessed subjects to determine the likely nature of any apnoeas present and the need for continuous positive airway pressure (CPAP). Results Of 40 patients, 15 (37.5%) had sleep apnoea and 5 (12.5%) required CPAP. One participant had oximetry consistent with central apnoea, later confirmed on a respiratory study.

Characteristics of the participants

	Sleep Apnoea	No Sleep Apnoea
Number	15	25
Males	14 (93%)	7 (28%)
Age	60.3 (SD 9.5)	61.8 (SD 10.6) NS
BMI	31.7 (SD 4.7)	28.7 (SD 5.6) NS
ESS	8.4 (SD 5.6)	6.9 (SD 3.4) (p=0.011)

The STOP-BANG questionnaire had a sensitivity of 100% and specificity of 60% for detecting sleep apnoea in this group. STOP questions alone had a sensitivity of 67% and specificity of 68%. For predicting sleep apnoea requiring CPAP their sensitivity was 100% and specificity 63%. Conclusion Undiagnosed sleep apnoea is highly prevalent in patients with PAF. The STOP-BANG questionnaire is highly sensitive for

detecting sleep apnoea in this group. The STOP questions appear to be a useful screening tool for sleep apnoea requiring CPAP in PAF patients.