Which bariatric patients need a pre-operative sleep study?

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Introduction

A significant number of patients with OSA are undiagnosed when they present for elective surgery including bariatric surgery. OSA has been linked with an increased incidence of postoperative complications [(1)]. Consequently there is increasing demand and referrals to the sleep clinics from bariatric clinics.

Several tools have been developed to meet a growing need for simple and sensitive screening test for the detection of patients with suspected OSA. One of them is the STOP-BANG questionnaire which has been validated in various patient populations [(2).]

Methods

Retrospective study of 79 patients referred from the endocrinologists/bariatric surgeon to the sleep clinic with presumptive diagnosis of OSA and who had limited polysomnography (PSG)

Patients dichotomized into those with AHI>15 who went onto CPAP and those who did not go onto CPAP. Comparisons were done between these two groups looking into demographics, AHI, ESS, BMI and STOPBANG scoring.

Results

As in tables 1 and 2

Mean and (SD)								
	Pt no	**M**	**F**	**AHI**	**ESS**	**BMI**	**Sleepy-Y/N**	
CPAP	51	19	32	35.6(21.7)	7.5 (4.59)	44.8(6.71)	32	19
No CPAP	28	4	24	6.16(4.4)	7.48*(5.8)	45.6(8.2)	12	13*
P Value				<0.0001	0.91	0.758		

* n=25; AHI - Apnoea Hypopnoea Index; ESS - Epworth Sleepiness Score; BMI - Body Mass Index

STOP-BANG SCORE			
STOP BANG	Mean(SD)	Median	IC Range
CPAP	5.16(1.49)	5	4-6
No CPAP*	4.6(1.39)	5	3.75-5.25
P Value	0.554		

* n = 20

Conclusions

1) There is a greater preponderance of females being investigated for OSA in the bariatric population.

2) Sleepiness as reported by patients, ESS and BMI did not differentiate between those who had symptoms of OSA that needed CPAP.

3) STOP-BANG score did not appear to be useful in identifying patients who would need CPAP.