Obstructive Sleep apnoea was classified as mild, moderate and severe based on AHI (mild <15/h, moderate 15–30/h and severe >30/h). TIA was defined as a neurological deficit which resolved completely within 24 h and was not associated with any changes on CT/MRI. Stroke was classified according to the territory involved and accompanied by CT/MRI changes. Cholesterol was checked in all the patients and associated Diabetes mellitus was noted as well.

Results In this cohort, more patients had severe sleep apnoea (62%). There was an increased incidence of cerebrovascular morbidities in the severe group as compared with the mild and moderate groups. 20% of all patients had hypercholesterolaemia (45% in the severe group), 10% of all patients had Transient Ischaemic Attack (80% in the severe group), 2% had Stroke (100% in the severe group) and 16% had Diabetes mellitus.

Conclusions Our study showed significant cerebrovascular comorbidities in patients with obstructive sleep apnoea. There is evidence to suggest that effective treatment of the sleep apnoea improves cerebrovascular outcomes. The fact that most of our patients with cerebrovascular comorbidity had TIA rather than strokes suggest that there is a window of opportunity to prevent further events by effective treatment. This certainly reduces the physical, social and financial burden incurred by strokes. We suggest that all patients with TIA should be screened for Obstructive Sleep apnoea and treated appropriately.

Abstract P205 Table 1

Severity	Male (77)	Female (23)	Hypercholesterolaemia (20)	TIA (10)	Stroke (2)	Diabetes (16)
Mild (8)	6	2	4	0	0	3
Moderate (30)	20	10	7	2	0	8
Severe (62)	51	11	9	8	2	5

P206 COMPLIANCE WITH CPAP: SUBJECTIVE VERSUS OBJECTIVE METHODS OF ASSESSMENT AND REGIONAL VARIATIONS

doi:10.1136/thx.2010.151068.7

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Background OSA is a significant public health problem which can be treated effectively with CPAP. Compliance of 4 h/night is required to achieve clinical effectiveness. Sleep clinics regularly monitor CPAP compliance subjectively, for example, patient questionnaires, but such estimates may differ from actual compliance.

Aim The aim of the study was to measure errors in estimating compliance and to look for regional variations in degrees of error.

Methods This is a prospective, two-centre study, carried out in 2009–2010. Centre 1 is a Tertiary centre with a local population including large numbers of South Asian people and those with lower socio-economic status. Centre 2 is a District General Hospital with a predominantly Caucasian local population. Both centres have similar sleep clinic setups and routinely download CPAP machine hours. Subjective compliance was assessed by patient questionnaires and objective evidence of compliance was obtained from machine usage data simultaneously.

Results 107 patients were included from each centre. In centre 1, 80% patients over-estimated their compliance, the mean objective usage of CPAP was 5.0 h/night and the mean error in estimating compliance was +2.2 h/night. In centre 2, 52% of patients over-estimated their compliance, the mean objective usage of CPAP was 5.67 h/night and the mean error in estimating compliance was +1.03 h/night. Patients in Centre 2 had significantly higher CPAP usage (5.67 vs. 5 h/night, p=0.02) and a lower percentage of people over-estimating their compliance (52% vs 80%, p<0.00001). Overall, there was still a significant error in estimating compliance, although this was lower in Centre 2 (1.03 vs 2.2 h/night, p<0.00001).

Discussion This study highlights the fact that patients tend to be significantly inaccurate about their compliance. Reasons for this are uncertain but may include aiming to please the health professional, poor cognitive insight into their usage and fear of relinquishing their machine. Electronic assessment of CPAP usage data should therefore be routine in all sleep clinics. Furthermore, there seem to be regional variations both in usage and in degrees of error. This may be attributed to differences in education levels and socio-economic status. Ethnicity may also contribute because of different cultural beliefs and lifestyles.

Abstract P206 Table 1

	Centre 1	Centre 2	p-Value
Mean usage (h/night)	5.0	5.67	p=0.02
Mean subjective error (h/night)	2.2	1.03	p<0.00001
Percentage of over-estimators (%)	80	52	p=0.00002

P207 OBSTRUCTIVE SLEEP APNOEA IN PATIENTS UNDERGOING BARIATRIC SURGERY—A LONDON TEACHING HOSPITAL EXPERIENCE

doi:10.1136/thx.2010.151068.8

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Introduction and Objectives Obstructive sleep apnoea (OSA) is common in patients scheduled for bariatric surgery and increases the likelihood of peri-operative adverse events. We aimed to describe the prevalence of OSA and risk profile of patients referred for pre-bariatric assessment locally.

Methods A retrospective observational study of patients referred to the sleep clinic for assessment before bariatric surgery between June 2008 and February 2010. Clinical and anthropometric data were collected from the hospital notes and sleep studies. Patient-reported STOP BANG model scores were recorded or derived retrospectively from clinical data. Non-parametric statistics were used due to non-normally distributed data.

Results 140/164 patients referred were seen in clinic. Referral rates increased from 2/month to 15/month in February 2010. The median (range) age was 46.5 (18–68) years, 71% female, weight 135.5 (87.4–180 kg), BMI 48.4 (35.3–84.5) kg/m^2), and median ESS was 11 (0–24). STOP BANG scores were reported or could be calculated in 84 patients, in whom the median score was 5/8 (2–8). When incomplete STOP BANG scores were included, 124/130 scored >2. 53% were non-smokers, 15% current smokers and were 37% ex-smokers. Comorbidities included: diabetes/IGT 70%, hypertension 50%, hypercholesterolaemia 39%, ACS/heart failure 9%, CVA 2%, COPD 3%, asthma 19%, and hypothyroidism 19%. Sleep studies were requested for 129 patients, completed in 116 patients. 114 were technically adequate for AHI and 106 for pulse oximetry. The median total AHI was 10.5 (0–111.2)/h, ODI 20.8 (0.2–145.2)/h, and mean SpO_2 93.4 (78.3–98.6)%. 27% had AHI ≥5/h, 12% ≥15/h and 25% ≥30/h. Correlations between sleep study outcomes and clinical data are shown in Abstract P207 Table 1. Using STOP BANG >2 to screen for AHI ≥5 had a sensitivity and specificity of 99.0% (95% CI 92.4 to 100%) and 5.6% (0.7–18.7%), respectively.