Abstract P209 Table 1 Demographics and comorbidities

PATIENT DEMOGRAPHICS		COMORBIDITIES	
Gender (female)	63	Hypertension	23
Age at referral (years)	9.7 (5–13.4)	Lipid abnormalities	45
Current age (years)	14.3 (10.6–16.3)	Type 2 diabetes	14
Age at commencing NIV (years)	11.6 (7–14.8)	Insulin resistance	50
CPAP	86	Steatohepatitis	18
BiPAP	14	Vitamin D deficiency	92
Adenotonsillectomy	45	Asthma	27
Chromosomal abnormality	23	Pulmonary hypertension	0
Child protection register	9	CAMHS	9

Results are presented as%. For ages, results are median (interquartile range)
CAMHS – Child and Adolescent Mental Health Services

P210 PERI-OPERATIVE TREATMENT OF SLEEP-DISORDERED BREATHING AND OUTCOMES IN BARIATRIC PATIENTS

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Background Obstructive sleep apnoea (OSA) is common in bariatric patients undergoing sedation during surgery. However, its contribution to peri-operative respiratory

complications and mortality has not been established. We sought to pre-operatively identify OSA in bariatric patients and record peri-operative complications following bariatric surgery.

Methods Data were collected and analysed from June 2014 to March 2017 for 410 bariatric surgery patients referred to the sleep laboratory for pre-operative screening and treatment of OSA. The STOP-BANG questionnaire, Epworth Sleepiness Scale (ESS) and nocturnal pulse oximetry were recorded and treatment was allocated with continuous positive airway pressure (CPAP). Peri-operative complications and mortality were the primary outcome measures for patients receiving CPAP treatment for OSA, with patients not requiring CPAP used as control. The mean follow-up time for all patients was 433 days; 732 days for the patients who had undergone bariatric surgery. The two groups were compared with Chi-square test and unpaired two-tailed t-test.

Results Significant OSA was present in 70% of the screened patients, 40% of patients involved in the study received CPAP treatment. Patients receiving CPAP treatment [49.5 (11.3) years old, 61% female, 50.3 (8.5) kg/m²] were older, had a lower female percentage and had a higher BMI than those not receiving CPAP [44.9 (12.0), 81% female, 46.6 (7.7)]. No significant differences, including hospital stay or rate of complications, were observed between patients on CPAP and those not on CPAP. Out of 53 patients who had undergone bariatric surgery at the cut-off date, only 1 respiratory complication had occurred.

Conclusion Bariatric patients who are screened pre-operatively for OSA and treated per guidelines have no increased risk of respiratory complications compared to patients without OSA.

Abstract P210 Table 1 Comparison of patients with CPAP vs those without CPAP. BMI, body mass index; HADS, hospital anxiety and depression scale; ODI, oxygen desaturation index; SpO₂, peripheral capillary oxygen saturation.

	CPAP	NON-CPAP	P-VALUE
Age (years)	49.5 (11.3); N = 155	44.9 (12.0); N = 241	<0.001
Male vs. Female ratio	0.63:1; N = 155	0.24:1; N = 244	<0.001
Weight (kg)	142.9 (29.8); N = 155	129.1 (24.5); N = 244	<0.001
BMI (kg.m ⁻²)	50.3 (8.5); N = 155	46.6 (7.7); N = 244	<0.001
Length of stay (days)	2.42 (1.0); N = 14	2.57 (1.3); N = 19	0.65 ^b
HADS (score out of 42)	16.1 (7.0); N = 10	20.5 (7.5); N = 14	0.153
Mean heart rate (min ⁻¹)	75.8 (10.6); N = 152	71.4 (8.4); N = 239	<0.001
Pulse rise (h ⁻¹)	41.8 (20.7); N = 150	28.9 (15.0); N = 240	<0.001
Mean spo ₂ (%)	92.7 (3.8); N = 153	95.1 (3.2); N = 244	<0.001
Nadir spo ₂ (%)	69.0 (11.3); N = 150	80.4 (5.7); N = 240	<0.001
4% ODI (h ⁻¹)	29.2 (19.7); N = 153	6.4 (6.5); N = 244	<0.001
3% ODI (h ⁻¹)	36.4 (21.1); N = 153	9.5 (8.0); N = 244	<0.001
<90% spo ₂ (% of sleep study)	16.5 (17.8); N = 153	2.4 (6.8); N = 244	<0.001