

IS ROUTINE PREOPERATIVE POLYSOMNOGRAPHY NECESSARY IN PATIENTS HAVING BARIATRIC SURGERY?

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Background: Obstructive sleep apnea (OSA) is recognized in obese patients. It maybe associated with significant perioperative morbidity and mortality. Polysomnography remains the gold standard for the diagnosis and assessment of the severity of OSA. Some Bariatric centers adopt a selective screening approach based on clinical suspicion; others, screen every patient. The aim of our study is to determine the prevalence of OSA , and whether BMI correlates with OSA prevalence. These results will form the basis for making a case for or against routine preoperative polysomnography in patients having bariatric surgery. Methods: A five year (2005- 2010) retrospective chart review was performed. Patients demographic and sleep study data was collected and analyzed. The severity of OSA was divided into mild, moderate or severe according to the American Sleep Disorders Association guidelines. Mild OSA is defined as an apnea/hypopnea index of 5-15, moderate as 15-30 and severe as ≥ 30 . Results were analyzed using statistical software. Results: 555 patient charts were reviewed. Of these, 359 (65%) had polysomnography. 309 (86%) of the 359 patients had OSA , 50 (14%) had no OSA. The overall prevalence of sleep apnea was 86%, mild OSA 18% (63/359), moderate OSA 17% (62/359), severe OSA 51% (184/359). The prevalence of OSA by BMI category was as follows: BMI (35-39.9 kg/m²): 92% (34/37). BMI (40-49.9 kg/m²): 82% (178/218). BMI (50-59.9 kg/m²): 92% (78/85). BMI (≥ 60 kg/m²): 100% (19/19). Conclusion: OSA is highly prevalent (86%) in our patient population, with most of them (51%) having severe OSA. OSA is highly prevalent in all BMI categories. However, a BMI ≥ 60 kg/m² correlates with a 100% prevalence of OSA. Based on these results, routine polysomnography is necessary as part of the pre operative work up for all bariatric patients .