

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 may be 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.

IS ROUTINE PREOPERATIVE VENOUS DUPLEX SCREENING NECESSARY FOR PATIENTS HAVING BARIATRIC SURGERY?

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Background: Morbidly obese patients are perceived to be at high risk for perioperative deep vein thrombosis (DVT). Routine preoperative bilateral lower extremity venous duplex screening for DVT is a part of their preoperative work up in many Bariatric centers. The purpose of our study is to determine the prevalence of preoperative DVT in our patient population, and form a basis to make a case for or against routine preoperative venous duplex screening in bariatric patients. **Methods:** A five year (2005-2010) retrospective chart review was performed, of our prospectively maintained bariatric database. Demographic data and the incidence of preoperative DVT was analyzed using statistical software. **Results:** 555 patients underwent bariatric surgery during this five year period. 402 (72%) were females, and 153 (28 %) were males. The age range was 18- 67 (median age 43). 454 (82 %) of patients were Caucasians, 46 (8%) were Hispanics, 45 (8%) were black and 10 (2%) other race. The mean BMI was 47.1 (SD 6.8). 177 (32%) patients underwent the Roux-en-y gastric bypass procedure, while 378 (68%) had the lap band procedure. Only one patient with a history of chronic DVT was found to have a positive preoperative venous duplex. The incidence of preoperative DVT was 0.2%. **Conclusion:** The incidence of preoperative DVT is very low in these patients. Routine preoperative venous duplex screening is therefore unnecessary. We would suggest preoperative duplex screening in those patients with a previous history of DVT or evidence of significant venous insufficiency

Routine Preoperative Barium Swallow to detect Hiatus Hernia in Bariatric Surgery Patients: Is it Worthwhile?

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Routine Preoperative Barium Swallow to detect Hiatus Hernia in Bariatric Surgery Patients: Is it Worthwhile? Purpose To determine if routine preoperative barium swallow before laparoscopic bariatric surgery can predict those patients who require crural repair for hiatus hernia. Method 100 consecutive patients undergoing bariatric surgery underwent preoperative barium swallow to detect hiatus hernia. The radiological results were compared to the operative findings. Results 98 patients underwent a complete radiological study. 17 patients were reported to have a hiatus hernia radiologically. 37 patients were found to have a hiatus hernia at operation, and had a sutured anterior crural repair as per our unit protocol.

Operative Finding	No Hiatus Hernia Radiological	Hiatus Hernia
Hiatus hernia	10	7
No Hiatus Hernia	51	30

The true positive rate was 7%. The calculated sensitivity for barium swallow in detecting a hiatus hernia prior to surgery was 21%. A positive barium swallow had a 41% probability of detecting a hiatus hernia subsequently confirmed at surgery. Conclusion Preoperative barium swallow in morbidly obese patients undergoing laparoscopic bariatric surgery was poor at predicting the presence of hiatus hernia. Routine barium swallow prior to bariatric surgery for the detection of hiatus hernia was unreliable and not warranted.

	Hiatus Hernia at Operation	No Hiatus Hernia
Positive Barium Study	7	10
Negative Barium Study	30	51

IS ROUTINE PREOPERATIVE UPPER ENDOSCOPY NECESSARY FOR PATIENTS HAVING BARIATRIC SURGERY?

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Background: Upper endoscopy is a routine preoperative investigation in patients undergoing bariatric operations in most bariatric centers. However, the level of evidence supporting this recommendation is rather not strong. The rationale for performing upper endoscopy is to detect and treat lesions that might potentially affect the type of surgery performed. The aim of our study is to analyze the prevalence of the various findings on preoperative upper endoscopy in our patient population, and to evaluate how these findings impacted the choice of surgery. Methods: A five year (2005-2010) retrospective chart review was performed, of our prospectively maintained bariatric database. Patient demographics, and endoscopy findings were collated. The prevalence of endoscopic findings was analyzed using statistical software. Results: 555 patient charts were reviewed, 389 (70%) of these had preoperative upper endoscopy. 381 (98%) of the 389 patients that had endoscopy show positive findings, 8 (2%) patients had normal findings. More than 90% of patients had a combination of at least two findings. The prevalence of individual findings are as follows: GASTRITIS: 92% (359/389), HIATAL HERNIA: 35 % (137/389). ESOPHAGITIS: 24% (94/389), HELICOBACTER PYLORI: 13% (50/389), DUODENITIS: 5% (20/389), POLYPS: 2% (8/389), ULCERS: 0.2% (1/389), TUMORS (LIPOMA): 0.2% (1/389), BARRETT'S 0.2% (1/389). Conclusion: Upper endoscopy has a high incidence of positive findings (98%) in bariatric patients, the most common being gastritis and hiatal hernia. The findings did not change the operative management for these patients. Given that patients are evaluated for hiatal hernias at the time of surgery, preoperative endoscopy is not necessary to make this diagnosis. Thus, routine preoperative upper endoscopy is unnecessary in the work-up of bariatric patients.