

“BMI is a weak predictor of difficult tracheal intubation-our experience” by Dr Dinesh Sangwan was published in Indian journal of anaesthesia.

Globally obesity was considered a rarity until the middle of the 20th century.[1] Today, a significant proportion of the adult population in the United States and throughout the developed world suffers from obesity. [2] [3] [4] It is currently estimated that more than 200 million Americans, or 65% of the U.S. adult population, are overweight or obese. The field of bariatric surgery has expanded accordingly over the past decade. Obesity related co-morbidity increases the risk of perioperative complications, and morbidly obese patients presenting for bariatric surgery pose particular challenges to the anesthetist. Airway management can be challenging; diligent preoperative assessment of some airway parameters can help anesthesiologist to properly assess the risk for intubation and avoid life-threatening complications. Difficult or failed intubation in patients with obesity is more common than in patients without obesity [5]. The predictors of difficult intubation in patients with obesity are modified. Anesthesiologists usually evaluate the neck circumference at the level of the thyroid cartilage and the so-called “Mallampati score.” In patients with morbid obesity (BMI>40 kg/m²), Mallampati class 3 and 4 and a neck circumference of 43 cm or more is related to increased risk of difficult tracheal intubation (DTI) [6,7,8] .When these parameters are normal, BMI is a weak predictor of difficult intubation.[9,10].

We conducted a Retrospective study which describes whether the magnitude of BMI have influence on difficult tracheal intubation, in a series of more than 100 patients with ASA II - IV with an average body mass index of 43.25 kg/m² who underwent laparoscopic bariatric surgery in the form of gastric bypass, sleeve gastrectomy and gastric banding at our institution. The study included 122 patients, 78 women (64%) and 44 men (36%) whose average age was 41.27 years (range 16-68 years). The average weight was 113.43 kg (74 - 240 kg), height 162.02 cm (141-195 cm) and BMI 43.25 kg/m² (range 27.4-68.5 kg/m²). 53 patients (43.44 %) had a BMI less than 40 kg/m², 27 patients (22.13%) had BMI in the range 40-45 kg/m² and 42 patients (34.43%) had a BMI greater than 45 kg/m². In the airway assessment, 48 patients (39.34%) were classified as Mallampati II and 74 (60.66%) as Mallampati III. 39.3443 % of patients with Neck size of 38.656 cm ± 3.304(33-48 cm) showed MPS grade II and 60.6557% of patients with neck size of 43.023 cm ± 4.240 (35-55 cm) showed MPS grade III. The laryngoscopy view by Cormack Lehane was graded as I in 34 (27.87%) patients, II-a in 38(31.15%), II-b in 35(28.69%) and III in 15(12.3%) patients. 27.8689% of patients with Neck size of 38.312 cm ± 3.049 showed Cormack Lehane laryngoscopic view grade I, 31.1475% of patients with Neck size of 41.500 cm ± 4.042 showed grade II-a, 28.6885% with Neck size of 42.157 cm ±3.983 showed grade II-b and 12.2951% of patients with Neck size of 45.61 cm ±4.79 showed Cormack Lehane grade of III.