# IS THE BODY MASS INDEX A RELIABLE PREDICTOR OF DIFFICULT AIRWAY IN BARIATRIC SURGERY?





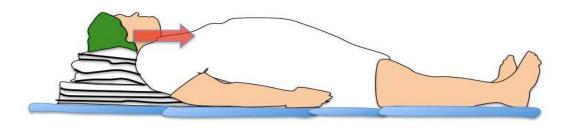
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## Background and goal of study

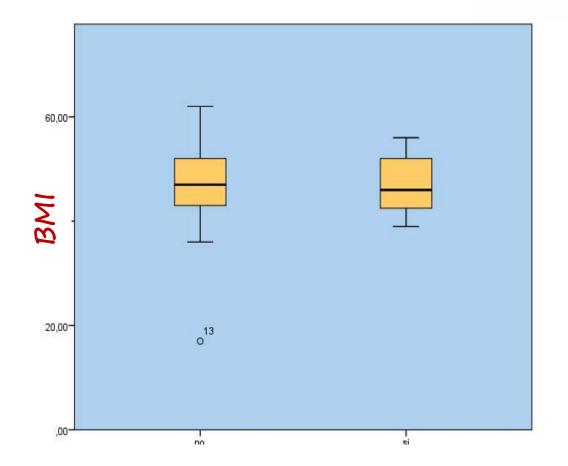
This study aimed to determinate the effectiveness of the body mass index (BMI) and other parameters as predictors of difficult airway in patients who underwent bariatric surgery in our hospital.





### Material and methods

This was a retrospective and observational study of patients (n = 107) who underwent bariatric surgery in our hospital from January to December 2016. Firstly, a multidisciplinary evaluation was completed to establish the indication for bariatric surgery in each case. Then, an airway examination was performed in the preanaesthesia evaluation including interdental distance (ITD), thyromental distance (TMD), Mallampati score, head extension and difficult airway scores (DAS): OBESE (mask), LEMON (intubation), RODS (LMA), SHORT (surgical airway). Finally, in the operating room (OR), cases of difficult airway were registered (primary endpoint). The following parameters were recorded: airway predictors in preanaesthesia evaluation, BMI, difficult airway in the OR and postoperative pulmonary complications after surgery. The study was carried out after the approval of the Hospital Ethic Committe. The data were analyzed with 95% confidence by SPSS20, using descriptive and analytic statistics.



#### Results and discussion

No statistically significant association between BMI and difficult airway in the OR was founded (p= 0.10). Likewise, Mallampati score, interdental distance and thyromental distance could not be considered as significant predictors in our group. In 11 cases (10,2%), difficult intubation devices were necessary. During immediate postoperative period respiratory failure was diagnosed in two patients.

#### Difficult airway

## Conclusion

BMI was not able to be considered as a reliable predictor of difficult airway in our morbid obesity group. Using algorithms and different devices for difficult airway is essential to secure quality and safety in clinical practice.

