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THE IMPORTANCE OF TREATMENT WITH PERIOPERATIVE CPAP IN PATIENTS WITH OSA/OHS CANDIDATE TO BARIATRIC SURGERY

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BACKGROUND

In morbid obesity, central fat accumulation pushes a significant load on the respiratory system, with the overall effect of decrease in lung volumes, lung/chest wall compliance and increased airway resistance, in all contributing to higher breathing work and shorter safe apnea time.

Obstructive Sleep Apnea (1)

OSA affects 2/3 of morbidly obese individuals undergoing bariatric surgery. Perioperative usage of continuous positive airway pressure (CPAP) is advised for moderate/severe OSA to avoid respiratory failure and cardiac events.

Obesity Hypoventilation Syndrome (2)

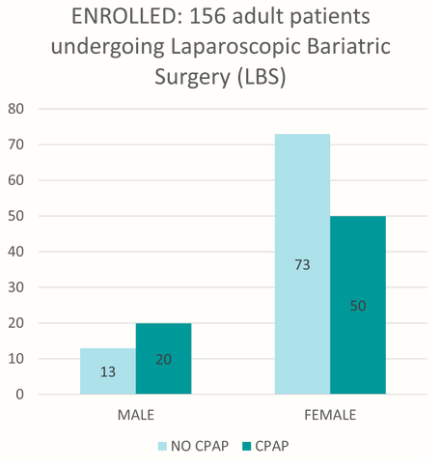
OHS is a respiratory consequence of morbid obesity characterized by alveolar hypoventilation during sleep and wakefulness. It involves a complex interaction between impaired respiratory mechanics, ventilatory drive and sleep-disordered breathing.

OBJECTIVES

In our Hospital we currently submit the STOP-BANG questionnaire (3) to all candidates for bariatric surgery, to identify moderate/high risk for OSA in order to direct them to specialistic evaluation and possibly start a CPAP treatment. We also submit patients with the clinical features of OHS to a blood gas analysis: if daytime hypoxemia and hypercapnia (>45mmHg) are present, then CPAP treatment should be considered.

MATERIALS AND METHODS

- Retrospective observational study
- Conducted from Jan 2021 to Dec 2022.



	MALE	FEMALE
MEAN BMI	41,86	40,96
MIN BMI	32,53	31,56
MAX BMI	54,11	31,56

RESULTS

No patient receiving perioperative CPAP and undergoing LBS (sleeve gastrectomy) had respiratory complications nor showed respiratory issues during the induction of general anesthesia, and none of them was admitted to ICU for postoperative care due to respiratory insufficiency.

CONCLUSION

Based on our experience, we can argue that an adequate perioperative ventilation strategy is useful in patients with OHS/OSA candidates for bariatric surgery (4), also for "ERAS" (Enhanced Recovery After Surgery) protocol applicability (5). We should preoperatively investigate these pathologies in order to direct patients to the appropriate treatment to minimize the risk of respiratory failure and to conduce a general anesthesia in the safest possible conditions.

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