

FACTORS INFLUENCING OXYGEN DESATURATION OF OBESE PATIENTS DURING INDUCTION OF GENERAL ANESTHESIA

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BACKGROUND

- One-third of adults in the U.S. have a Body Mass Index (BMI) > 30 and are obese. ¹
- Physiologic changes associated with obesity affect most organ systems of the body. ²
- Changes within the pulmonary system in obese patients can produce significant oxygen desaturation with induction of general anesthesia. ³

PURPOSE

- This study evaluated factors which could influence oxygen desaturation in obese patients during induction of general anesthesia in the outpatient setting.

MATERIALS AND METHODS

- Retrospective electronic chart review
- Non-experimental, descriptive design
- Study site: Outpatient Surgery, Level 1 trauma center
- Non-probability, convenience sample
- Women and men, age 20-60
- Sample size: N=104



RESULTS

- 12 patients (11.5%) received oxygen in the pre-operative holding area.
- No patients who received oxygen in the pre-operative holding area had oxygen desaturation occur.
- Two patients (2.2%) had oxygen desaturation occur.
- Mean length of time to oxygen desaturation was 1.5 minutes.
- Time to oxygen desaturation was not statistically significant between obese patients who received oxygen in the pre-operative holding area and those who did not.

CONCLUSIONS

- Obese patients in this study were well-oxygenated during induction of general anesthesia without receiving supplemental oxygen in the pre-operative holding area.

REFERENCES

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