PENGARUH TEKNIK PREOKSIGENASI *EIGHT DEEP BREATH* TERHADAP SATURASI OKSIGEN PADA PASIEN BEDAH SARAF

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ABSTRAK

Latar Belakang: Bedah saraf memerlukan anestesi umum yang berisiko menyebabkan desaturasi, yang dapat menimbulkan komplikasi serius seperti henti jantung dan hipoksia otak. Teknik preoksigenasi konvensional sering kurang efektif, terutama pada pasien yang tidak kooperatif atau dalam kondisi darurat. Teknik preoksigenasi *eight deep breath* menawarkan alternatif lebih cepat dan efektif untuk meningkatkan cadangan oksigen dan mengurangi risiko desaturasi.
Tujuan: Mengetahui pengaruh teknik preoksigenasi *eight deep breath* terhadap saturasi oksigen pada pasien bedah saraf.
Metode: Jenis penelitian ini adalah kuantitatif eksperimental menggunakan metode *quasy experiment* dengan *nonequivalent control group design*. Sampel diambil berdasarkan teknik *consecutive sampling* berjumlah 64 responden dengan masing-masing kelompok terdiri dari 32 responden. Uji statistik yang digunakan yaitu *Wilcoxon* dan *Mann-Whitney* menggunakan SPSS.
Hasil: Pada kelompok teknik preoksigenasi *eight deep breath*, rata-rata saturasi oksigen meningkat dari 94.03% (*pre-test*) menjadi 98.59% (*post-test*) dengan nilai *mean rank* sebesar 16.50 dan tidak ada penurunan (*negative ranks* = 0). Pada kelompok teknik preoksigenasi *tidal volume breath*, peningkatan terjadi dari 95.81 (*pre-test*) menjadi 96.38 (*post-test*) dengan *mean rank* untuk *positive ranks* 6.93 dan *negative ranks* sebesar 4.38. Hasil ini menunjukkan bahwa teknik preoksigenasi *eight deep breath* lebih efektif dalam meningkatkan saturasi oksigen.
Kesimpulan: Ada pengaruh pemberian teknik preoksigenasi *eight deep breath* terhadap saturasi oksigen pada pasien bedah saraf.

Kata kunci: saturasi oksigen, *eight deep breath*, *tidal volume breath*, bedah saraf.

THE EFFECT OF EIGHT DEEP BREATH PREOXYGENATION TECHNIQUE ON OXYGEN SATURATION IN NEUROSURGERY PATIENTS

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ABSTRACT

Background: Neurosurgery requires general anesthesia that risks causing desaturation, which can lead to serious complications such as cardiac arrest and brain hypoxic. Conventional preoxygenation techniques are often less effective, especially in uncooperative patients or in emergency conditions. The eight deep breath preoxygenation technique offers a faster and effective alternative to increase oxygen reserves and reduce the risk of desaturation.
Objective: Knowing the effect of eight deep breath preoxygenation techniques on oxygen saturation in neurosurgical patients.
Methods: This type of research is quantitative experimental using quasy experiment method using nonequivalent control group design. The sample was taken based on consecutive sampling technique totaling 64 respondents with each group consisting of 32 respondents. The statistical tests used were Wilcoxon and Mann-Whitney using SPSS.
Results: In the eight deep breath preoxygenation technique group, the average oxygen saturation increased from 94.03% (pre-test) to 98.59% (post-test) with a mean rank value of 16.50 and no decrease (negative ranks = 0). In the tidal volume breath preoxygenation technique group, the increase occurred from 95.81 (pre-test) to 96.38 (post-test) with a mean rank for positive ranks are 6.93 and negative ranks are 4.38. These results indicate that the eight deep breath preoxygenation technique is more effective in improving oxygen saturation.
Conclusion: There is an effect of giving eight deep breath preoxygenation techniques on oxygen saturation in neurosurgical patients.

Keywords: oxygen saturation, eight deep breath, tidal volume breath, preoxygenation, neurosurgery.