HUBUNGAN STATUS PEROKOK AKTIF DENGAN NILAI *END-TIDAL* CO2 (EtCO2) PADA PASIEN DENGAN GENERAL ANESTESI DI RSUP DR SITANALA TANGERANG

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ABSTRAK

Latar Belakang: Merokok merupakan masalah kesehatan global yang signifikan, berkontribusi terhadap berbagai penyakit serius dan komplikasi dalam konteks anestesi. Pasien dengan riwayat merokok memiliki risiko lebih tinggi terhadap komplikasi intra-anestesi, termasuk perubahan nilai *End-tidal* CO2 (EtCO2) yang dapat mempengaruhi hemodinamik selama prosedur anestesi.

Tujuan: Mengetahui hubungan status perokok aktif dengan nilai EtCO2 pada pasien dengan general anestesi di RSUP Dr. Sitanala Tangerang.

Metode: Penelitian menggunakan desain kuantitatif observasional analitik dengan pendekatan *cross-sectional*. Sebanyak 66 responden, terdiri dari 33 perokok aktif dan 33 bukan perokok, diobservasi. Data dikumpulkan melalui wawancara untuk menentukan status merokok dan pengukuran EtCO2 dilakukan setiap 10 menit selama 30 menit intra operasi menggunakan monitor mesin anestesi.

Hasil: Hasil penelitian menunjukkan bahwa rata-rata perokok aktif mengalami hiperkapnia, sedangkan bukan perokok rata-rata normokapnia. Uji statistik *Chi-Square* menunjukkan nilai $p < 0,05$ dan koefisien kontingensi sebesar 0,610

Kesimpulan: Ada hubungan sinifikan antara status perokok aktif dengan nilai *End-tidal* CO_2 pada pasien dengan general anestesi di RSUP Dr sitanala Tangerang dengan keeratan hubungan yang kuat.

Kata Kunci: Anestesi, *End-tidal* CO_2, Perokok Aktif.

THE RELATIONS OF SMOKER STATUS AND END-TIDAL CO_2 IN PATIENTS WITH GENERAL ANESTHESIA AT DR SITANALA CENTRAL GENERAL HOSPITAL, TANGERANG

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ABSTRACT

Background: Smoking is a significant global health issue, contributing to various serious diseases and complications in the context of anesthesia. Patients with a history of smoking have a higher risk of intra-anesthetic complications, including changes in End-tidal CO2 (EtCO2) levels that can affect hemodynamics during anesthesia procedures.

Objective: To determine the relationship between active smoking status and EtCO2 levels in patients undergoing general anesthesia at RSUP Dr. Sitanala Tangerang.

Methods: This study used a quantitative observational analytic design with a cross-sectional approach. A total of 66 respondents were observed, consisting of 33 active smokers and 33 non-smokers. Data were collected through interviews to determine smoking status, and EtCO2 measurements were taken every 10 minutes for 30 minutes during the intraoperative period using an anesthesia machine monitor.

Results: The results showed that, on average, active smokers experienced hypercapnia, while non-smokers averaged normocapnia. The Chi-Square statistical test indicated a p-value < 0.05 and a contingency coefficient of 0.610, indicating a significant relationship between active smoking status and EtCO2 levels, demonstrating a strong relationship.

Conclusion: There is a significant relationship between active smoking status and End-tidal CO2 levels in patients undergoing general anesthesia at RSUP Dr. Sitanala Tangerang, with a strong degree of association.

Keywords: Anesthesia, *End-tidal* CO_2, Active Smokers.