

HUBUNGAN SATURASI OKSIGEN DENGAN KEJADIAN BATUK SAAT PEMBERIAN INDUKSI FENTANIL PADA GENERAL ANESTESI DI RSUD DOKTER HARJONO PONOROGO

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ABSTRAK

Latar Belakang: Fentanyl adalah opioid yang sering digunakan saat induksi anestesi umum, namun dapat memicu refleks batuk (*Fentanyl-Induced Cough/FIC*). Saturasi oksigen (SpO₂). Saturasi oksigen (SpO₂) merupakan parameter penting dalam anestesi, namun hubungannya dengan FIC (*Fentanyl-Induced Cough*) masih belum banyak diteliti.

Tujuan: Menganalisis hubungan antara saturasi oksigen dengan kejadian batuk saat induksi fentanyl pada anestesi umum, serta mendeskripsikan karakteristik pasien dan kejadian batuk yang terjadi.

Metode: Penelitian ini adalah studi analitik observasional dengan desain potong lintang. Sebanyak 68 pasien anestesi umum dengan induksi fentanil di RSUD Dr. Harjono diamati. Data SpO₂ pra-pasca induksi dan kejadian batuk (ringan, sedang, berat) dikumpulkan. Analisis menggunakan uji Kolmogorov-Smirnov dan korelasi Spearman Rho.

Hasil: Mayoritas pasien berjenis kelamin laki-laki, berusia 46–55 tahun, dengan status ASA II, dan memiliki IMT normal. Kejadian batuk ditemukan sebesar 23,5%, dengan derajat ringan paling banyak. Terdapat hubungan negatif yang signifikan antara saturasi oksigen pasca induksi dengan kejadian batuk ($p = -0.342$, $p = 0.004$), yang menunjukkan bahwa semakin rendah SpO₂ pasca induksi, semakin tinggi kejadian batuk. Tidak ditemukan hubungan yang signifikan antara SpO₂ pra induksi dengan kejadian batuk ($p = 0.117$).

Kesimpulan: Terdapat hubungan yang signifikan antara saturasi oksigen pasca induksi dengan kejadian batuk saat induksi fentanyl pada anestesi umum. Saturasi oksigen yang lebih rendah pasca induksi berkorelasi dengan peningkatan risiko batuk. Pemantauan saturasi oksigen selama induksi penting untuk meminimalkan risiko.

Kata kunci: Fentanil, Kejadian Batuk, Saturasi Oksigen, Anestesi Umum, Induksi

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THE RELATIONSHIP BETWEEN OXYGEN SATURATION AND COUGHING DURING FENTANYL INDUCTION IN GENERAL ANAESTHESIA AT RSUD DOKTER HARJONO PONOROGO

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ABSTRACT

Background: Fentanyl is a commonly used opioid in general anesthesia induction, but its administration can trigger a cough reflex known as Fentanyl-Induced Cough (FIC). Oxygen saturation (SpO₂) is a critical parameter in anesthesia, yet its relationship with FIC remains underexplored.

Purpose: The study aims to analyze the relationship between oxygen saturation and the occurrence of cough during fentanyl induction in general anesthesia, as well as to describe patient characteristics and the incidence of cough.

Method: This study was an observational analytic research with a cross-sectional design. A total of 68 general anesthesia patients with fentanyl induction at RSUD Dr. Harjono were observed. Data on pre- and post-induction SpO₂ and cough incidence (mild, moderate, severe) were collected. Analysis was conducted using Kolmogorov-Smirnov and Spearman's Rho tests.

Result: The majority of patients were male, aged 46–55 years, with ASA II status and normal BMI. The incidence of cough was 23.5%, mostly mild in severity. There was a significant negative correlation between post-induction oxygen saturation and cough incidence ($\rho = -0.342$, $p = 0.004$), indicating that lower post-induction SpO₂ levels were associated with a higher incidence of cough. No significant correlation was found between pre-induction SpO₂ and cough incidence ($p = 0.117$).

Conclusion: There is a significant relationship between post-induction oxygen saturation and the incidence of cough during fentanyl induction in general anesthesia. Lower SpO₂ levels post-induction correlate with a higher likelihood of cough. Monitoring oxygen saturation during induction is essential to mitigate risks.

Keywords: Fentanyl, Coughing, Oxygen Saturation, General Anesthesia, Induction.

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