

**“COMPARISON OF HEMODYNAMIC BETWEEN PROPOFOL AND
KETAMINE DURING GENERAL ANESTHESIA INDUCTION IN PATIENTS
AT THE CENTRAL SURGERY INSTALLATION OF NGUDI WALUYO
WLINGI BLITAR REGIONAL HOSPITAL”**

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ABSTRACT

Background: Hemodynamic stability is an important aspect of general anesthesia. Propofol and ketamine have different pharmacological effects on the cardiovascular system, resulting in different hemodynamic responses during anesthesia induction.

Objective: This study had aimed to determine the differences in hemodynamic status between patients who had received propofol induction and those who had received ketamine induction during general anesthesia.

Methods: This study had employed a retrospective comparative cohort design involving 126 patients, consisting of 63 patients in the propofol group and 63 patients in the ketamine group. Data had been obtained from medical records of patients who had undergone general anesthesia at RSUD Ngudi Waluyo Wlingi Blitar from October to December 2025. Hemodynamic parameters included systolic blood pressure, diastolic blood pressure, mean arterial pressure (MAP), heart rate (HR), and oxygen saturation (SpO₂). Data had been analyzed at a significance level of $p < 0.05$.

Results: The results had shown significant differences in hemodynamic parameters between the propofol and ketamine groups during the observation period ($p < 0.05$). The propofol group had demonstrated decreases in blood pressure, MAP, and HR, whereas the ketamine group had maintained better hemodynamic stability. SpO₂ values had remained within normal limits in both groups.

Conclusion: Hemodynamic status had differed significantly between patients who had received propofol induction and those who had received ketamine induction during general anesthesia. Ketamine had demonstrated better hemodynamic stability than propofol during the induction phase.

Keywords: propofol; ketamine; hemodynamics; general anesthesia

PERBEDAAN HEMODINAMIK PADA PASIEN DENGAN INDUKSI PROPOFOL DAN KETAMIN DALAM GENERAL ANESTESI DI IBS RSUD NGUDI WALUYO WLINGI BLITAR

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ABSTRAK

Latar Belakang: Stabilitas hemodinamik merupakan aspek penting dalam tindakan general anestesi karena perubahan tekanan darah, mean arterial pressure (MAP), heart rate (HR), dan saturasi oksigen dapat meningkatkan risiko komplikasi perioperatif. Propofol dan ketamin merupakan agen induksi anestesi yang memiliki efek farmakologis berbeda terhadap sistem kardiovaskular sehingga dapat menghasilkan respons hemodinamik yang berbeda selama fase induksi anestesi.

Tujuan: Mengetahui perbedaan status hemodinamik antara pasien yang mendapatkan induksi propofol dan ketamin pada tindakan general anestesi di Instalasi Bedah Sentral RSUD Ngudi Waluyo Wlingi Blitar.

Metode: Penelitian ini menggunakan desain *retrospective comparative cohort study*. Sampel penelitian berjumlah 126 pasien yang terdiri dari 63 pasien kelompok propofol dan 63 pasien kelompok ketamin yang dipilih berdasarkan kriteria inklusi dan eksklusi. Data diperoleh dari rekam medis pasien yang menjalani general anestesi periode Oktober–Desember 2025. Parameter hemodinamik yang dianalisis meliputi tekanan darah sistolik, tekanan darah diastolik, MAP, HR, dan SpO₂ pada waktu sebelum induksi (T0), 5 menit (T1), 10 menit (T2), dan 15 menit (T3) setelah induksi anestesi. Analisis data dilakukan menggunakan uji statistik dengan tingkat kemaknaan $p < 0,05$.

Hasil: Hasil penelitian menunjukkan bahwa kelompok propofol mengalami penurunan tekanan darah sistolik, tekanan darah diastolik, MAP, dan HR setelah induksi anestesi, sedangkan kelompok ketamin mengalami peningkatan pada parameter tersebut. Terdapat perbedaan yang bermakna pada parameter hemodinamik antara kelompok propofol dan ketamin selama periode observasi ($p < 0,05$). Nilai SpO₂ pada kedua kelompok relatif stabil dalam batas normal.

Kesimpulan: Terdapat perbedaan status hemodinamik antara pasien yang mendapatkan induksi propofol dan ketamin pada tindakan general anestesi. Ketamin menunjukkan kemampuan mempertahankan stabilitas hemodinamik yang lebih baik dibandingkan propofol selama fase induksi anestesi.

Kata kunci: propofol; ketamin; hemodinamik; general anestesi