

**PERBEDAAN EFEKTIVITAS ELEVASI KAKI 45° DAN RANGE OF
MOTION PASIF PADA EKSTREMITAS BAWAH TERHADAP
KEJADIAN HIPOTENSI PASIEN PASCA SPINAL ANESTESI
DI RS LAVALETTE MALANG**

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ABSTRAK

Spinal anestesi dapat menyebabkan komplikasi berupa hipotensi akibat adanya blokade pada saraf simpatis yang menyebabkan vasodilatasi pembuluh darah mempengaruhi tekanan darah. Penelitian ini bertujuan untuk mengetahui perbedaan efektivitas elevasi kaki 45° dan ROM pasif ekstremitas bawah terhadap kejadian hipotensi pasien pasca spinal anestesi di RS Lavalette Malang. Desain penelitian yang digunakan yaitu *quasi experimental* dengan pendekatan *non equivalent control group pretest posttest design*. Metode pengambilan sampel yang digunakan adalah *purposive sampling* dengan jumlah 30 responden yang terbagi dalam 1 kelompok kontrol dan 2 kelompok perlakuan. Responden ditentukan berdasarkan kriteria inklusi pasien hipotensi pasca spinal anestesi dengan tekanan darah sistolik ($80 \text{ mmHg} < \text{sistolik} < 100 \text{ mmHg}$). Variabel independen yaitu elevasi kaki 45° dan ROM pasif ekstremitas bawah, sedangkan variabel dependen yaitu hipotensi. Hasil uji statistik *independent t-test* didapatkan nilai p-value 0.003 ($p < 0.05$) yang berarti H_1 diterima. Maka terdapat perbedaan signifikan antara tekanan darah sistolik setelah diberikan elevasi kaki 45° dan setelah diberikan ROM pasif ekstremitas bawah. Elevasi kaki 45° lebih efektif dalam menurunkan kejadian hipotensi pasien pasca spinal anestesi yang ditunjukkan dengan perbedaan mean sebesar 7.8 mmHg. Hal ini dikarenakan elevasi kaki dapat mempercepat aliran balik vena menuju jantung akibat pengaruh gaya gravitasi, sehingga jumlah darah yang dipompa oleh jantung semakin banyak dan meningkatkan tekanan darah sistolik. Saran, penelitian ini dapat dikembangkan dengan menggunakan desain penelitian yang bisa mengontrol variabel luar yang mungkin berpengaruh terhadap variabel dependen.

Kata Kunci: elevasi kaki, *range of motion* pasif, hipotensi, spinal anestesi

**DIFFERENCES IN THE EFFECTIVENESS OF 45° FEET ELEVATION
AND PASSIVE RANGE OF MOTION IN THE LOWER EXTREMITIES
ON THE INCIDENCE OF HYPOTENSION IN POST-SPINAL
ANESTHESIA PATIENTS AT LAVALETTE HOSPITAL MALANG**

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ABSTRACT

Spinal anesthesia can cause complications in the form of hypotension due to the blockade of the sympathetic nerves, which causes vasodilation in the blood vessel walls and affects blood pressure. The purpose of this study was to determine the difference in the effectiveness of 45° leg elevation and passive range of motion (ROM) of the lower extremities on the incidence of hypotension in post-spinal anesthesia patients at Lavalette Hospital, Malang. The research design used was quasi-experimental with a non-equivalent control group pretest-posttest design approach. The sampling method used in this study was purposive sampling, involving a total of 30 respondents divided into one control group and two intervention groups. Respondents were determined based on the inclusion criteria of hypotensive patients with systolic blood pressure after spinal anesthesia (80 mmHg < systolic < 100 mmHg). The independent variables were 45° leg elevation and passive ROM of the lower extremities, while the dependent variable was hypotension. The results of the independent t-test statistical analysis showed a p-value of 0.003 ($p < 0.05$), indicating that the alternative hypothesis (H1) is accepted. This means, there is a significant difference between systolic blood pressure after 45° leg elevation and after passive range of motion (ROM) of the lower extremities. The 45° leg elevation is more effective in reducing the incidence of hypotension in patients after spinal anesthesia, as indicated by a mean difference of 7.8 mmHg. This is because leg elevation can accelerate venous return to the heart due to the influence of gravity, thereby increasing the volume of blood pumped by the heart and raising systolic blood pressure. This study can be further developed by employing a research design that is capable of controlling external variables that may influence the dependent variable.

Keywords: leg elevation, passive range of motion, hypotension, spinal anesthesia