Hubungan *Mean Arterial Pressure* Pasca Hipotensi Permisif dengan Volume Perdarahan Intra Operatif Pada Pembedahan Tulang Belakang di RSUD dr. M. Soewandhie Kota Surabaya

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ABSTRAK

Latar Belakang : Pembedahan tulang belakang memiliki risiko perdarahan intraoperatif yang tinggi akibat kompleksitas struktur anatomi dan banyaknya vaskularisasi, sehingga diperlukan strategi anestesi untuk menjaga stabilitas hemodinamik selama operasi. Salah satu metode yang digunakan adalah strategi hipotensi permisif melalui pengendalian Mean Arterial Pressure (MAP) untuk menurunkan tekanan hidrostatik intravaskular dan mengurangi volume perdarahan intraoperatif. Penelitian ini bertujuan untuk mengetahui hubungan Mean Arterial Pressure (MAP) pasca tindakan hipotensi permisif dengan volume perdarahan intraoperatif pada pembedahan tulang belakang di RSUD dr. M. Soewandhie Kota Surabaya. Penelitian ini menggunakan desain kuantitatif observasional analitik dengan pendekatan cross-sectional retrospective. Sampel penelitian menggunakan teknik total sampling terhadap pasien pembedahan tulang belakang dengan anestesi umum di RSUD dr. M. Soewandhie Kota Surabaya. Data diperoleh dari rekam medis meliputi karakteristik pasien, nilai MAP intraoperatif, serta volume perdarahan intraoperatif. Analisis data dilakukan menggunakan uji Pearson Correlation. Hasil penelitian menunjukkan rerata MAP intraoperatif berada pada rentang hipotensi permisif moderat dan volume perdarahan intraoperatif mayoritas berada pada kategori ringan dengan rerata 264,90 mL. Analisis statistik menunjukkan terdapat hubungan antara *Mean Arterial Pressure* (MAP) dengan volume perdarahan intraoperatif, di mana peningkatan MAP cenderung diikuti peningkatan volume perdarahan selama operasi. Kesimpulan penelitian ini menunjukkan bahwa pengendalian Mean Arterial Pressure (MAP) melalui strategi hipotensi permisif dapat membantu menurunkan volume perdarahan intraoperatif pada pembedahan tulang belakang.

Kata Kunci: Mean Arterial Pressure, hipotensi permisif, perdarahan intraoperatif, pembedahan tulang belakang, anestesi umum.

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The Relationship Between Mean Arterial Pressure Post-Permissive Hypotension to Intraoperative Blood Loss in Spinal Surgery at RSUD dr. M. Soewandhie Kota Surabaya

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ABSTRACT

Background : Spinal surgery carries a high risk of intraoperative bleeding due to the complexity of spinal anatomy and extensive vascularization, requiring appropriate anesthetic strategies to maintain hemodynamic stability during surgery. One commonly used method is permissive hypotension through Mean Arterial Pressure (MAP) control to reduce intravascular hydrostatic pressure and minimize intraoperative blood loss. This study aimed to determine the relationship between Mean Arterial Pressure (MAP) following permissive hypotension and intraoperative blood loss in spinal surgery at RSUD dr. M. Soewandhie Surabaya. This study employed a quantitative observational analytic design with a retrospective cross-sectional approach. Samples were collected using a total sampling technique from spinal surgery patients undergoing general anesthesia at RSUD dr. M. Soewandhie Surabaya. Data were obtained from medical records, including patient characteristics, intraoperative MAP values, and intraoperative blood loss volume. Data analysis was performed using Pearson Correlation analysis. The results showed that the average intraoperative MAP was within the moderate permissive hypotension range, while the majority of intraoperative bleeding was categorized as mild, with an average blood loss of 264.90 mL. Statistical analysis demonstrated a relationship between Mean Arterial Pressure (MAP) and intraoperative blood loss, where increased MAP tended to be associated with greater blood loss during surgery. In conclusion, controlling Mean Arterial Pressure (MAP) through a permissive hypotension strategy may help reduce intraoperative blood loss in spinal surgery.

Keywords: Mean Arterial Pressure, permissive hypotension, intraoperative bleeding, spinal surgery, general anesthesia.

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