

Perbandingan Efek Pencegahan Magnesium Sulfat dengan Petidin Intravena terhadap Kejadian Menggigil Selama Operasi Reseksi Prostat Transuretra dengan Anestesi Spinal

Mariko Gunadi,¹ Iwan Fuadi,² Tatang Bisri²

¹Rumah Sakit Santo Yusup Bandung, ²Departemen Anestesiologi dan Terapi Intensif Fakultas Kedokteran Universitas Padjadjaran/Rumah Sakit Dr. Hasan Sadikin Bandung

Abstrak

Gangguan termoregulasi berupa menggigil sering terjadi selama operasi dengan anestesi spinal. Tujuan penelitian ini membandingkan efek pencegahan kejadian menggigil selama operasi reseksi prostat transuretra dalam anestesi spinal antara $MgSO_4$ dan petidin. Penelitian ini merupakan uji klinis acak terkontrol tersamar ganda pada 42 pasien dengan status fisik *American Society of Anesthesiologist* (ASA) II atau III, usia 60–70 tahun yang menjalani operasi reseksi prostat transuretra di kamar operasi bedah sentral Rumah Sakit Dr. Hasan Sadikin Bandung pada bulan Maret–September 2014. Pasien dibagi dalam kelompok $MgSO_4$ dan kelompok petidin. Data karakteristik, kejadian menggigil, suhu tubuh inti, monitoring tanda vital, dan efek samping dicatat. Hasil penelitian menunjukkan efek pencegahan kejadian menggigil kelompok $MgSO_4$ lebih baik dibanding dengan kelompok petidin dan kejadian menggigil di kamar operasi 4/21 vs 9/21, sedangkan di ruang pemulihan kejadian menggigil sama pada kedua kelompok (1/21). Simpulan penelitian ini menunjukkan pemberian $MgSO_4$ intravena sebelum anestesi spinal secara klinis mengurangi kejadian menggigil selama operasi dan memiliki efek pencegahan menggigil yang lebih baik dibanding dengan petidin.

Kata kunci: Anestesi spinal, menggigil, $MgSO_4$, petidin

Comparison of Anti-Shivering Effect of Intravenous Magnesium Sulfate with Pethidine during Transurethral Resection of the Prostate under Spinal Anesthesia

Abstract

Shivering, as a result of impaired thermoregulatory, is frequent during surgery under spinal anesthesia. The purpose of this study was to compare the anti-shivering effect between intravenous $MgSO_4$ and pethidine during transurethral resection of the prostate under spinal anesthesia. This study was a randomized double-blind controlled trial in 42 patients with American Society of Anesthesiologist (ASA) physical status II or III, aged 60–70 years who underwent transurethral resection of the prostate at the central operating theater of Dr. Hasan Sadikin General Hospital Bandung within March–September 2014. The patients were divided into $MgSO_4$ group and pethidine group. Characteristics of data, the incidence of shivering, body core temperature, vital signs monitoring, and adverse events were recorded. Antishivering effect of $MgSO_4$ was better compared to pethidine, with the incidence of shivering in operating theatre was 4/21 vs 9/21. However, in the recovery room, the incidence of shivering was the same for both groups (1/21). It is concluded that the administration of intravenous $MgSO_4$ before spinal anesthesia clinically reduces the incidence of shivering during surgery and has a better anti-shivering effect compared to intravenous pethidine.

Key words: $MgSO_4$, pethidine, shivering, spinal anesthesia