Kombinasi anestesi umum dan anestesi spinal dibandingkan anestesi umum dan blok transversus abdominis plane pada laparoskopi: kajian terhadap nyeri pascaoperatif, perubahan hemodinamik intraoperatif, dan masa pulih = Combination of general anesthesia and spinal anesthesia versus general anesthesia and transversus abdominis plane block at laparoscopy: a study of postoperative pain, intraoperative hemodynamic changes, and recovery time

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Abstrak

Pendahuluan: Laparoskopi memiliki risiko intraoperatif dan pascaoperasi, termasuk instabilitas hemodinamik dan nyeri pascaoperasi. Anestesi umum sering digunakan untuk operasi ini, namun teknik ini tidak menekan peningkatan resistensi vaskular sistemik selama laparoskopi sehingga fluktuasi hemodinamik tetap terjadi. Sayatan dinding abdomen dan regangan peritoneum selama operasi juga menyebabkan nyeri somatis dan viseral yang dirasakan pascaoperasi. Penambahan blok TAP pada operasi laparoskopi belum memuaskan disamping memerlukan instrumen tambahan serta bergantung pada kemampuan operator. Anestesi spinal dapat menguntungkan karena dapat menetralkan peningkatan SVR dan menghambat nyeri selama operasi, namun penggunaannya dikaitkan dengan mobilisasi yang tertunda. Penelitian ini bertujuan untuk mengetahui apakah kombinasi anestesi umum dan anestesi spinal lebih baik dalam menjaga perubahan hemodinamik intraoperatif, nyeri pascaoperasi, dan waktu pulih dibandingkan anestesi umum dan blok TAP.
Metode: Penelitian ini merupakan uji klinis acak tersamar tunggal pada 40 pasien yang dibagi menjadi 2 kelompok. Kelompok S (spinal) dilakukan anestesi spinal menggunakan bupivacaine 10 mg + morfin 50 mcg intratekal disusul anestesi umum. Kelompok T (blok TAP) dilakukan anestesi anestesi umum disusul blok TAP dengan bupivacaine 0.25% 20 ml pada kedua sisi abdomen. Perubahan tekanan darah dan nadi, NRS pascaoperasi 3 jam dan 6 jam, waktu untuk mencapai Bromage 0, serta kejadian nyeri bahu dan mual muntah pascaoperasi dicatat. Hasil: Pada kelompok S terdapat perubahan tekanan darah sistolik yang signifikan dibandingkan dengan kelompok T setelah 15 menit insuflasi (-9,35(±19,69) vs 7,65(±16,34), p<0,05). Tidak ada perbedaan nyeri pascaoperasi dan waktu pulih pada kedua kelompok.
Kesimpulan: Kombinasi anestesi umum dan anestesi spinal lebih baik dalam menurunkan tekanan darah sistolik, namun tidak berbeda dalam nyeri pascaoperasi, dan waktu pulih dibandingkan kombinasi anestesi umum dan blok TAP.
.....Introduction: Laparoscopy is associated with intraoperative and postoperative risks, including hemodynamic instability and postoperative pain. Although general anesthesia is often used for this procedure, hemodynamic fluctuations still occur because this technique does not suppress the increase in systemic vascular resistance during laparoscopy. Incisions in the abdominal wall and stretching of the peritoneum during surgery can also cause somatic and visceral pain after surgery. Adding TAP block to laparoscopic surgery is not satisfactory, apart from requiring additional instruments and depending on the operator’s abilities. Spinal anesthesia may be beneficial as it can counteract the increase in SVR and suppress pain during surgery, but its use is associated with delayed mobilization. The purpose of this study

is to determine whether the combination of general and spinal anesthesia is superior in maintaining intraoperative hemodynamic changes, postoperative pain, and recovery time compared to general anesthesia and TAP blockade.
Methods: This study is a single-blind, randomized clinical trial with 41 patients divided into two groups. Group S (spinal) received spinal anesthesia with 10 mg bupivacaine + 50 g morphine administered intrathecally, followed by general anesthesia. Group T (TAP block) received general anesthesia followed by TAP block with 20 ml of 0.25% bupivacaine on each side of the abdomen. Intraoperative blood pressure and heart rate changes, NRS at 3 and 6 hours postoperatively, time to reach bromage 0, and occurrence of postoperative shoulder pain and nausea and vomiting were recorded.
Results: In group S there was a significant change in systolic blood pressure compared to group T after 15 minutes of insufflation (-9,35(±19,69) vs 7,65(±16,34), $p<0,05$). There was no difference in postoperative pain and recovery time in the two groups.
Conclusion: The combination of general anesthesia and spinal anesthesia is better in reducing systolic blood pressure, but does not differ in postoperative pain and recovery time compared to the combination of general anesthesia and TAP block.