Efficacy of intrathecally administered dexmedetomidine versus dexmedetomidine with fentanyl in patients undergoing major abdominal cancer surgery.

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Abstract:

BACKGROUND: Most of the clinical experience gained in the use of intrathecal alpha-2-adrenoceptor agonists has been described with clonidine. Human studies using a combination of intrathecal dexmedetomidine and local anesthetics are lacking. OBJECTIVES: A safety investigation and comparison of the analgesic efficacy of intrathecally administered dexmedetomidine or dexmedetomidine combined with fentanyl in patients undergoing major abdominal cancer surgery. STUDY DESIGN: A randomized, double-blind trial. SETTING: Academic medical center. METHODS: Ninety patients were randomly assigned to receive intrathecally either 10 mg bupivacaine 0.5% (control group, n = 30), or 10 mg bupivacaine 0.5% plus 5 μg dexmedetomidine (dexmedetomidine group, n = 30), or 10 mg bupivacaine 0.5% plus 5 μg dexmedetomidine and 25 μg fentanyl (dexmedetomidine+fentanyl group, n = 30). Assessment parameters included hemodynamics, sedation score, pain severity, time of first analgesia request, total analgesia consumption, and side effects in the first 24 hours. RESULTS: The mean intraoperative heart rate was significantly reduced in the dexmedetomidine group (P

Keywords:

dexmedetomidine, fentanyl, intrathecal, postoperative pain

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