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Comparason of Peri-Articular Multimodal Drug Injection with Femoral and Sciatic Nerve Block after Total Knee Arthroplasty

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ABSTRACT

Good perioperative analgesia following total knee arthroplasty facilitates rehabilitation and may reduce hospital stay. We present the patient analgesic requirements and rehabilitation of a prospective single surgeon series after the introduction of a multimodal drug injection during his total knee arthroplasty. Basic epidemiological data as well as analgesic, antiemetic requirements and time to straight leg raised was collected on 27 consecutive patients (group 1) whom received the multimodal drug injection, consisting of levobupivacaine, ketorolac and adrenaline at the time of their total knee arthroplasty under spinal anaesthesia. Their rehabilitation was compared to a retrospective review of patients who were case matched by age and sex (group 2n = 26), whom had received the unit standard of spinal anaesthetic and a femoral and sciatic block at the time of their operation. Patients in group 1 had significantly lower analgesic and antiemetic requirements than group 2. Group 1 also had a significantly shorter hospital stay. We have demonstrated that periarticular multimodal drug injection can improve perioperative analgesia and mobilisation following total knee arthroplasty as well as reducing opioid requirements and side effects.

KEYWORDS

Analgesia; Total Knee Replacement; Multimodal Drug Injection; Peripheral Nerve Blocks; Rehabilitation

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