Does anesthetic technique influence functional recovery after total knee arthroplasty?

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Introduction

Faster functional recovery after surgery is the purpose of enhanced recovery in orthopedics1 and the anesthetic technique may be of influence2. This study aims to review the patients who underwent a total knee arthroplasty during two different time periods in our hospital.

Results

We studied 119 patients, 61 from group A and 58 from group B. Patient characteristics were similar in the two groups (Table 1). Both intraoperative anesthesia technique and postoperative regional analgesia were significantly different between the two groups. Patients in group A had mostly a combined spinal-epidural anesthesia or a subarachnoid combined with single-shot femoral block while those in group B received a subarachnoid block and a continuous femoral block (Table 2). Regarding functional recovery, patients in group B were capable of a higher knee flexion angle in the immediate postoperative period and this finding reached statistical significance in postoperative days 2 and 3 (p-value 0.004 and 0.040, respectively), as shown in Graph 1. Time to discharge was not statistically different.

Conclusion

Anesthetic technique for total knee arthroplasty has changed in our hospital, from a combined spinal-epidural anesthesia to a subarachnoid block followed by a continuous femoral block. Functional recovery, as shown by active knee flexion angle, has improved and this may be the result of a different anesthetic approach.

References