#1626 - Posters

Femoral Nerve Block Versus Periarticular Injection In Primary Total Knee Arthroplasty

Orthopaedics / Knee & Lower Leg / Joint Replacement - Primary

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Introduction

Pain management after a total joint arthroplasty remains an important factor to take into account to allow a faster rehabilitation reducing the risk of post operative complications.

Objectives

Our goal was to compare the pain management of patients who undergo a primary total knee arthroplasty under a spinal block associated to a femoral block versus a spinal block associated to a intraoperative periarticular injection.

Methods

A prospective, single blind, clinical trial was performed. 40 patients treated between May 2013 to June 2014 were included. All patients underwent an arthritic primary total knee arthroplasty. They were divided into two groups. Group I: Spinal block associated to an intraoperative periarticular injection and group B: Spinal block associated to a femoral block. We included patients of both genders with degenerative arthritic knees. We excluded patients with post traumatic arthritic knees, tumors, revision surgeries, allergies to anesthetics, chronic use of opioid therapies, psychiatric patients, substance abuse, active gastroduodenal ulcers, history of gastrointestinal bleeding or chronic kidney disease. We considered the pain, motor response, pain while doing physiotherapy, pain medication while admitted and length of stay in hospital.

Results

The patients were divided into 2 groups: Group I (Spinal block associated to an intraoperative periarticular injection), 20 patients, 50%; and group B (Spinal block associated to a femoral block), 20 patients, 50%. Average age was 67 years (range, 54 – 76). The motor response after surgery was similar at 1 hour after surgery as well as after full recovery from anesthesia. Post operative pain appearance was better with the periarticular joint injection than the femoral block (210 minutes postop versus 177 minutes). Pain while doing physiotherapy was similar in both groups as well as the need for pain medication and length of stay in hospital. There were no complications associated with either technique of anesthesia.

Conclusions

The results were similar in both groups regarding post operative pain management and length of stay in hospital. Since the femoral block is a more demanding technique, the periarticular joint injection is a valid and useful technique in the multimodal management of knee arthroplasty patients.