Results of Controlled Randomized Trial of use of Popliteal Block for Pain Relief in Ankle and Hindfoot Surgery

Presenting:
Ravindra H. Mahajan, MS, DNB, MRCS
Bournemouth, Dorset, UK

Additional Authors:
Rakesh Dalai, MS, FRCS (Orth)
Clare Cullen, MCS, FRCS (Orth)

Summary:
Popliteal block offers an effective way of pain relief in ankle and hind foot surgery. We believe that it may reduce amount of anaesthetic or analgesic drug requirement as well.

Abstract:

Introduction
We hereby present results of controlled randomized trial of use of popliteal block for pain relief in ankle and hind foot surgery.

Materials and methods
We have studied 63 patients over period of 9 months in 2007-08. Patients who needed ankle or hind foot procedure were selected for trial. Patients were explained about the trial and popliteal block along with leaflets at preoperative clinics. Patients were randomized on the day of surgery. A sealed envelop stating whether patient will go to block group (A) or no block group (B) was opened in the anaesthetic room before the patient was anaesthetized. Patients were evaluated for subjective pain scores at 30 min, 6 hrs, 12 hrs and 24 hrs after surgery. Amount of analgesic required and time to first dose was documented. Popliteal blocks were given by one foot and ankle consultant and one trained fellow. The block was administered in lateral position at 0.8 mA stimulus to detect the nerve. The data was compared statistically between group A and B.

Results
The average pain scores in Group A (33 pts) were 0.72, 1.60, 1.51 and 1.03 at 30 min, 6 hrs, 12 hrs and 24 hrs respectively. While in Group B (30 pts) it was 2.73, 5.5, 6.03 and 3.33 at 30 min, 6 hrs, 12 hrs and 24 hrs respectively. There was statistically significant difference in pain scores at 6 and 12 hrs. There was no statistically significant difference in pain scores at 30 min and 24 hrs. Time to the request for first analgesic was statistically longer in Group A.

Conclusion
Popliteal block offers an effective way of pain relief in ankle and hind foot surgery. We believe that it may reduce amount of anaesthetic or analgesic drug requirement as well.