

#### **PD-45. A PROSPECTIVE, RANDOMIZED COMPARISON OF TWO INFUSION TECHNIQUES FOR CONTINUOUS SUBGLUTEUS SCIATIC NERVE BLOCK AFTER ORTHOPEDIC FOOT AND ANKLE PROCEDURES**

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**Background and objective:** To compare continuous infusion or a patient-controlled technique for postoperative analgesia after foot surgery, using a new subgluteus approach for continuous sciatic nerve block.

**Methods:** Fifty healthy patients, undergoing orthopedic foot surgery received a continuous sciatic nerve block using a new subgluteus approach. All blocks were placed with the aid of a nerve stimulator, using a 10-cm, 18-Gauge insulated Tuohy needle. After either the flexion or dorsiflexion of the operated foot was elicited at  $\dot{N}T$  0.5 mA, 20 ml of 0.75% ropivacaine was injected with repeated aspiration tests, followed by the introduction of a 20-Gauge epidural catheter. Postoperatively 0.2% ropivacaine was infused with either a 10 ml/hr continuous infusion (group Continuous, n = 25) or with a 5 ml/hr basal rate with 5 ml bolus every 60 min (group PCA, n = 25). Intraoperative analgesic supplementation, as well as postoperative pain relief, morphine consumption, incidence of complication, and patient satisfaction were recorded by an independent observer.

**Results:** The sciatic catheter was successfully placed in all patients. Intravenous fentanyl supplementation (dose range: 50  $\circ$ V 150  $\acute{E}$ g) was required in 4 patients in each group, but no patient required general anesthesia. Catheter dislocation was reported in 2 patients (4%). The quality of pain relief was good in both groups without complications. Nine patients of the group Continuous (37%) and 7 patients of the group PCA (29%) required rescue morphine analgesia because of pain on the femoral dermatomes (P = 0.76). Ropivacaine consumption was 240 ml in the group Continuous (range 200  $\circ$ V 240 ml) and 140 ml in the group PCA (range 120  $\circ$ V 290 ml) (P = 0.0005). Patient acceptance was good in both groups.

**Conclusions:** The continuous subgluteus sciatic nerve block represents an easy and reliable option for postoperative analgesia after foot surgery; using a patient controlled rather than a continuous infusion technique reduces the consumption of local anesthetic solution without affecting the quality of pain relief.