LOW-EXTREMITY PERIPHERAL NEURAL BLOCK IN PATIENTS WITH SEQUELA OF POLIOMYELITIS: OUTCOME OF 37 CONSECUTIVE CASES

Authors: Sergio S. Mello, Samuel M.C. Teixeira, Renato A. Saraiva – Hospital SARAH-Belo Horizonte, Brazil

BACKGROUND AND AIMS

Poliomyelitis (polio) survivors are now presenting for painful surgical procedures (Fig 01). Sometimes postoperative pain control is neglected in these patients. Peripheral neural blocks (PNB) are almost never used in these cases. We studied, retrospectively, patients with polio sequelae submitted to PNB for lower-extremities orthopaedic surgeries.

METHODS

The study was approved by the Ethics Committee of the Institution. The medical records of patients with clinical and electroneuromyographic diagnosis of poliomyelites without symptoms of post-polio syndrome, submitted to foot or ankle surgery in low-extremities and that received PNB with neurostimulation technique from 2002 to 2007 were analysed. Demographic data, blocked nerves, difficulty to elicit the correct muscle response, analgesic efficacy, per/postoperative neurologic complaints and sequelae were evaluated and compared with control group of 39 patients without neuropathy, submitted to ankle arthrodesis in the same period.

RESULTS

The records of 27 polio patients submitted to 37 surgeries were evaluated. The post-operative follow up was at least 1 year. No sequelae was observed. A total of 59 nerves were blocked in polio group (graph 1). Ropivacaine 0.4–0.7% was used in all cases. The block was effective in 91.7% of polio group. In two patients of this group the anesthesiologist could not stimulate one nerve (1 popliteal; 1 femoral). These blocks failed. The rate of postoperative neurologic complaints (NC) in polio group (16.2%) was similar to control group (15.4%) and review data (13.6%) – p=0.96. The complex regional pain syndrome type I (CRPS) was the main postoperative neurologic finding in both groups.

CONCLUSION

This study suggests that patients with polio sequelae could be submitted to peripheral nerve blocks as an anesthetic technique without additional risk, when compared with patients without polio in similar conditions. Effective management of postoperative pain is very important to avoid chronic complications.

REFERENCES