

# COMBINED LUMBAR PLEXUS AND SCIATIC NERVE BLOCK IN A PATIENT WITH AMYOTROPHIC LATERAL SCLEROSIS

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Argomento: Anestesia loco-regionale e analgesia

**Introduction.** Surgical patients with amyotrophic lateral sclerosis (ALS) may be at increased risk for general anesthesia related ventilatory depression and postoperative respiratory complications, abnormal response to muscle relaxants, and sensitivity to opioids, sedatives.

Epidural and spinal anesthesia are also relatively contraindicated in patients with a motor neuron disease such as ALS, for fear of exacerbating the disease.

Moreover, patients with ALS have impairment of autonomic nervous system.

Having obtained written consent, we report the anaesthetic management of a hip fracture in a patient with ALS.

**Case Report.** A 59 year-old-male with ALS and moderate physical activity, was admitted for total hip arthroplasty.

Preoperative evaluation revealed dysarthria, difficulty in swallowing, muscle atrophy, weakness, and fasciculation of the upper and lower extremities, pulmonary emphysema.

Anesthesia plan included lumbar plexus, sciatic and lateral femoral cutaneous nerve block with a total of 25 ml 1% Mepivacaine and 20 ml 0,5% Levobupivacaine.

Sensitive block and analgesia were effective and the patient maintained a good hemodynamic stability during the surgery.

Peripheral nerve blocks allowed to obtain a long lasting postoperative analgesia and only 1 g of paracetamol was administered, avoiding the administration of systemic opioids and NSAIDs.

The anesthesia was performed without immediate complications or postsurgical neuropathy worsening.

No other complications occurred during the intraoperative and postoperative period.

**Conclusion.** We suggest that peripheral nerve blocks can be chosen as an alternative technique to neuraxial blocks and general anesthesia in ALS patients undergoing surgery on extremities.

Hemodynamic stability, maintenance of pharyngeal-laryngeal reflexes and elimination of the risk of bladder dysfunction reduce the onset of complications during the intraoperative and postoperative period.