



LETTER TO THE EDITOR

Use of femoral and sciatic nerve block combination in Parkinson's disease

Parkinson hastalığında femoral ve siyatik sinir bloğu kombinasyonu

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To the Editor,

Parkinson's disease (PD) is a degenerative disorder of the central nervous system.^[1] Perioperative anesthetic management of PD can be challenging for anesthesiologists due to neurological, respiratory, cardiovascular, and autonomic nervous system abnormalities, and the interaction of antiparkinsonian drugs with anesthetic agents. Here, we would like to present our experience with the combination of femoral and sciatic nerve block in a patient with PD who was scheduled for hallux valgus surgery. Written informed consent was obtained for the publication of this report.

A 52-year-old male patient was evaluated under elective conditions for hallux valgus surgery. In his anamnesis, it was learned that he had PD for 12 years and used rasagiline 1×1 mg, pramipexole 1×1.5 mg, and levodopa/carbidopa intestinal gel via percutaneous endoscopic gastrostomy. On physical examination, he had significant resting tremors in the bilateral upper extremities. Laboratory tests were all in the normal range. No premedication was applied to the patient. The patient's initial vital signs in the operating room were as follows: heart rate 83 beats/min, noninvasive blood pressure 92/55 mmHg, and 90% SpO₂. Since the surgeon stated that a thigh tourniquet would be used in the surgery, we performed an ultrasound-guided (USG) sciatic nerve block by subgluteal approach with 20 ml of 0.375% bupivacaine in the prone position, and a femoral nerve block at the femoral crease with 15 ml of the same solution. A

sufficient block level was achieved in 30 minutes. The patient, who did not experience any adverse events during the 90-minute surgery and in the PACU, was sent to the service. In the postoperative follow-up of the patient, complete sensory and motor recovery was detected 12 hours later.

The abnormal function of the laryngeal muscles, retained secretions, atelectasis, aspiration, respiratory infections, post-extubation laryngospasm, and postoperative respiratory failure are frequently observed in PD following general anesthesia. General anesthesia also alters PD symptoms. Post-induction hypotension, chest rigidity, and postoperative nausea and vomiting due to opioid use are common complications associated with general anesthesia. Regional anesthesia techniques decrease these risks in PD.^[2] However, neuraxial blocks may not be applied in elderly patients with multiple comorbidities and taking anticoagulant therapy.^[3] Peripheral nerve blocks may be a good alternative in these patients.^[4]

An ankle block may offer a better option than the combination of femoral and sciatic nerve block for hallux valgus surgery. However, in our case, the surgery was performed using a thigh tourniquet because of the surgeon's experience and preference. Regarding longer tourniquet time, we chose to perform USG femoral and sciatic nerve blocks for possible pain due to ischemia and direct compression of the tourniquet at a proximal site. An ankle block wouldn't have been effective for thigh tourniquet pain.

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We think that the combination of femoral and sciatic nerve block should be kept in mind as an effective anesthetic technique for foot surgery in patients with PD when other alternatives are not feasible due to particular requirements of the surgery and patient.

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