



Successful Anaesthetic Management of Elderly Patients with Leprosy

Lepralı Yaşlı Hastada Başarılı Anestezi Yönetimi

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Leprosy is a chronic granulomatous infection that is caused by *Mycobacterium leprae* (1), wherein autonomic function is affected to varying degrees, and the important manifestations of such a dysfunction include orthostatic hypotension, baroreflex dysfunction and postprandial hypotension (2). Patients with leprosy have impaired respiratory function, breath holding time and response to cough (3). Hence, anaesthesiologists should be aware of complications, including difficult intubation and perioperative anaesthetic problems, in the management of patients with leprosy. Herein we present a case of a patient with leprosy having a transtrochanteric femur fracture who was successfully operated under spinal anaesthesia.

A 70-year-old male patient with lepromatous leprosy, Parkinson's disease and coronary artery disease was scheduled for a surgical repair of a transtrochanteric fracture of the femur. The patient was a known case of lepromatous leprosy for at least 2 years and received 100 mg dapsone per day po. The patient was symptomatic for cardiovascular disease. Preoperative electrocardiogram (ECG) revealed sinus rhythm, complete left bundle branch block and inferior wall ischaemia. Echocardiography revealed an ejection fraction of 50% with left ventricular diastolic dysfunction. After explaining the procedure and the risks involved to the patient, written informed consent was obtained. In the operating room, ECG, non-invasive blood pressure (NIBP) and pulse oximetry were attached and baseline parameters were noted. An 18-G intravenous cannula was secured. Preoperative heart rate was 90/min, blood pressure was 170/100 mm Hg, respiratory rate was 22/min and SpO₂ (on room air) was 90%. An 18-G epidural catheter was inserted via the L3-L4 space with the patient in the left lateral position using midline approach and fixed at 11 cm. At the same level, 15 mg of 0.5% heavy bupivacaine was administered in the subarachnoid space using a 25-G Quincke's spinal needle. Supplemented oxygen was administered via a venturi facemask (FiO₂ 0.5). A sensory loss up to T7 level was achieved with adequate motor paralysis after 9 min, and surgery was then initiated. ECG, NIBP and SpO₂ were monitored. No complication was developed during operation.

Leprosy is an uncommon disease in developed countries. A literature review suggests that there is limited information regarding the surgical management of patients with leprosy. During the course of leprosy, cell-mediated immunity reduces because of a decline in T-cell responses (4). In addition, patients with leprosy may have cardiac and respiratory dysautonomia and autonomic involvement. Therefore, proper pre-anaesthetic assessment and optimization with intraoperative period, adequate monitoring and preparation are essential while managing patients with leprosy. In our patient with leprosy, the other risk factor was advanced age. However, no adverse events were observed in the intra- and postoperative period. In conclusion, anaesthesiologists can use both spinal and epidural anaesthesia in elderly patients with leprosy.

References

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