PROLONGED AXILLARY BLOCK WITH LEVOBUPIVACAINE IN AN UREMIC PATIENT

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Regional blocks improve the success rate of arterionenous fistula (AVF) procedure in patient with end stage kidney disease (ESKD)\(^1\). We report one case of prolonged axillary block (BAX) in a 73-yr woman undergoing an iterative AVF. Her preoperative kaliemia and creatinine were respectively 6.1mEq and 280mmoles per liter. Twenty milliter of 0.5% levobupivacaine were infused selectively under ultrasound guidance. Her complete motor block lasted 30 hours then resolved completely without any sequelae. Data suggest that the hyperynamic state and chronic acidosis increase the elimination of local anesthetic (LA) and cause a 40% reduction in the duration of analgesia\(^2\). Though reduced clearance request needs to reduce the LA dose\(^3\). Moreover, we think that a uremic neuropathy may explain a so prolonged BAX. Neuropathy is a common complication in 65% of patients with ESKD\(^4\). Their nerves exist in a chronically depolarized state prior to dialysis, with improvement and normalization of resting membrane potential after dialysis. Maintenance of normal serum K\(^+\) between dialysis reduces the incidence and severity of such neuropathy. In patient scheduled for AVF under BAX, anesthesiologist have to seek for clinical features reflecting large-fiber involvement, as paresthesias, reduction in deep tendon reflexes, impaired vibration sense, muscle wasting, and weakness. Faster elimination half life local anesthetic have to be recommended.

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References