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Letter to Editor

Is It Still Prohibited to Perform Spinal Anesthesia in Patients with Advanced Heart Disease?

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Spinal anesthesia is generally prohibited in patients with severe valvular heart disease (e.g. severe aortic stenosis), cardiomyopathies and heart failure concerning the hemodynamic effects of sympathetic system blockade in patients with limited cardiac output [1-2]. However, based on our experience, in these patients, intrathecal single injection of low doses of local anesthetic (LA) (bupivacaine 5 mg) in combination with 25-50 micrograms of fentanyl or 5 micrograms of sufentanil can be administered safely in lower abdominal and lower limb surgeries lasting 60 to 90 minutes [3-4]. In longer surgeries, we place epidural catheters in the intrathecal space through Tuohy epidural needle and intermittently administer low doses of LA plus low doses of fentanyl or sufentanil as surgically necessary. In these settings, the hemodynamics are stable and the appropriate time covers with no significant adverse effects. We did not observe post-spinal headache in our cases. May be because these patients are mostly in the old age and not at the risk of post-spinal headache.

Standard continuous intrathecal catheters are not available in many centers. So, we suggest that in patients with limited cardiac output, placement of epidural catheters in the spinal space through Tuohy epidural needle can be used as continuous spinal anesthesia for injection of low doses of intrathecal drugs. However, the risk- benefit ratio should be considered when using spinal anesthesia in this group of patients.

In general, addition of low dose short-acting opioids to low dose LA provides stable hemodynamics, ensures effective anesthesia and enhance postoperative analgesia.

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