CONTINUOUS SPINAL ANESTHESIA IN A PATIENT WITH AORTIC STENOSIS

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Purpose: General anesthesia is usually advocated in patients with moderate to severe aortic stenosis (AS) for its hemodynamically stable properties\(^1\), however the patient’s individual characteristics may require a different anesthetic management. In this case we successfully used a titratable continuous spinal anesthetic technique to manage a patient with chronic obstructive pulmonary disease (COPD), a potentially difficult airway, and moderate AS for a hip fracture repair.

Clinical features: Informed consent was obtained to release this information for publication. An 81 year-old male presented in the ER with a left-sided hip fracture for urgent surgical repair. His past medical history included moderate aortic stenosis with peak/mean gradient 55/32 mmHg and aortic valve area of 1.04 cm\(^2\), COPD and signs of potential difficult airway. After reviewing risks and benefits, we elected to proceed with a titratable continuous spinal anesthesia. The patient remained clinically stable during the 90 minutes of surgery with a stable systolic blood pressure and required only one dose of vasopressor (5 mg of ephedrine) about 15 minutes after spinal was initiated. Patient had a fast and uncomplicated recovery post operatively.

Conclusion: Although the safety of neuraxial anesthesia in patients with moderate to severe AS continues under investigation, the use of a titratable continuous spinal anesthetic technique allowed us to successfully manage a patient undergoing hip fracture repair with multiple complicating factors. Further research regarding the anesthetic technique in patients with AS is warranted to enhance our ability to provide safe anesthetic management that is tailored to the individual patient.

References: