

## Unexpected causes of intraoperative arrhythmia

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To the Editor:

An arrhythmia that develops during surgery may be a predictor for a significant problem in the patient for which evaluation of underlying causes is required. Transurethral resection was scheduled in an 89-year-old man with prostatic hypertrophy. Preoperative examination revealed no significant findings except a history of hypertension. Spinal anesthesia with 0.5 % hyperbaric bupivacaine (12.5 mg) was performed successfully, and the maximum level of anesthesia was at T8 level. Ephedrine 10 mg bolus was given when blood pressure (BP) decreased from 170/110 mmHg at baseline to 110/60 mmHg 15 min after spinal anesthesia. BP was then stabilized. Toward the end of surgery, frequent ventricular extra-systoles developed; thus, lidocaine infusion was initiated in the patient. After transfer to the postanesthesia care unit, hypertension and bradycardia (44 bpm) that did not respond to administration of atropine (1 mg) developed in the patient. Heart rate increased to 75 bpm from administration of an additional atropine dose (total dose 2 mg). A first degree

atrioventricular block was detected on ECG (Supplementary Figure 1). Although blood tests including cardiac enzymes were normal, lethargy and impaired cooperation developed within approximately 30 min. As Babinski reflex was detected in neurological examination, the patient underwent an immediate CT scan, which revealed a tumor (18 × 17 mm) and a hypo-dense area related to edema in surrounding tissues in the right cerebellum. Perioperative arrhythmia may develop because of several reasons. Incidence of brain tumors is particularly high in elderly individuals, although it can be seen at all ages [1]. In conclusion, there may be no symptom in anamnesis, or neurological signs may be masked in elderly individuals. Thus, anesthesiologists should be experienced not only in treating intraoperative arrhythmia, but also in identifying possible causes underlying arrhythmia.

**Conflict of interest** None.

### References

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