Rate of administration of intravenous ondansetron

Sir,

Ondansetron, a selective 5- HT, receptor antagonist, is a popular drug for prevention and treatment of postoperative nausea and vomiting (PONV) because of its efficacy, safety and lack of drug interactions. Although rare, cardiovascular adverse effects such as sinus bradycardia, atrial fibrillation, prolongation of QTc interval and fatal ventricular tachycardia have been reported following administration of ondansetron.^[1-4] A case of severe bradycardia with respiratory arrest and loss of consciousness has been described.^[5] Most of the case reports regarding serious adverse effects, including that reported in Indian Journal of Anaesthesia by Sahu et al.,^[4] do not describe the rate at which ondansetron had been administered to the patient. It is not uncommon for residents to administer ondansetron as a bolus perioperatively. Not many clinicians are aware that ondansetron 4 to 8 mg iv should be administered over 2 to 5 min [6] and certainly not as a bolus or in less than 30 s. Perhaps slow administration of ondansetron as recommended over 2-5 min would decrease the incidence of potentially life-threatening adverse effects associated with ondansetron.

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REFERENCES

- Moazzam MS, Nasreen F, Bano S, Amir SH. Symptomatic sinus bradycardia: A rare adverse effect of intravenous ondansetron. Saudi J Anaesth 2011;5:96-7.
- 2. Kasinath NS, Malak O, Tetzlaff J. Atrial fibrillation after ondansetron for the prevention and treatment of nausea and vomiting: A case report. Can J Anesth 2003;50: 229- 31.
- Chandrakala R, Vijayashankara CN, Kumar K, Sarala N. Ondansetron induced ventricular tachycardia. Indian J Pharmacol 2008;40:186-7.
- Sahu S, Karna ST, Agarwal A, Ambesh SP, Srivastava A. Ondansetron causing near fatal catastrophe in a renal transplant recipient. Indian J Anaesth 2011;55:81-2.
- Afonso N, Dang A, Namshikar V, Kamat S, Rataboli PV. Intravenous ondansetron causing severe bradycardia: Two cases. Ann of Card Anaesth 2009;12: 172-3.

 Stoelting RK, Hillier SC, editors. Pharmacology and physiology in anesthetic practice 4th ed. Philadelphia (PA): Lippincott Williams and Wilkins; 2006. p. 444- 55.

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