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Comment on 'Sustained intraoperative bradycardia revealing Sengers syndrome'

Sir,

We read with interest the article 'Sustained intraoperative bradycardia revealing Sengers syndrome' by Zarrouk *et al.*^[1] We have some queries regarding anaesthetic management of this case. First, the cumulative dose of propofol used for a 6 kg infant was very high (total 48 mg propofol was used, which is 8 mg/kg). The persistent bradycardia, decreased cardiac contractility and decreased cardiac output (EtCO₂ of 8 mmHg) could be likely outcomes with the usage of such high doses of propofol. The dose of atropine given is also not mentioned before labelling it as atropine-resistant bradycardia. Atropine used in small doses can itself lead to bradycardia. Second, the authors mention that intubation was attempted after induction of anaesthesia with sevoflurane and 3 mg/kg of propofol. Application of noxious stimulus such as laryngoscopy and intubation in these situations can lead to the occurrence of laryngospasm. We suggest the use of muscle relaxant such as succinylcholine or atracurium would have facilitated smooth anaesthesia induction and intubation. Incomplete laryngospasm that occurred, in this case, should have been treated with positive pressure ventilation, a low dose of propofol and use of succinylcholine in low doses such as 0.1 mg/kg. Lactic acidosis that occurred, in this case, could also be because of hypoperfusive state and use of adrenaline at the time of resuscitation. It would have been interesting to know how soon the lactic acidosis cleared in this case.

Further, the authors labelled this case as Sengers syndrome, which is a combination of congenital cataract, hypertrophic cardiomyopathy and lactic acidosis. However, it has not been supported by a

skeletal muscle biopsy or genetic testing which are diagnostic modalities for Sengers syndrome.^[2] While we may agree with authors that this was a case of Sengers syndrome, the sequence of events could also be explained as fallouts of anaesthesia management.

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Conflicts of interest

There are no conflicts of interest.

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