J Anesth (2014) 28:952
DOI 10.1007/s00540-014-1839-1

LETTER TO THE EDITOR

Myotonic dystrophy diagnosed after cesarean section

Yumiko Shirasawa · Kazuyoshi Ishida · Mishiya Matsumoto

Received: 23 February 2013 / Accepted: 18 March 2014 / Published online: 15 May 2014

Keywords Cardiac conduction abnormality · Cesarean section · Myotonic dystrophy

To the Editor:

A 30-year-old woman with marginal placenta previa underwent urgent cesarean section under general anesthesia because of uncontrollable contractions of the uterus at 32 weeks of pregnancy. Anesthesia was induced with thiopental and suxamethonium, and maintained with N_2O, sevoflurane, and rocuronium until delivery, and propofol and fentanyl after delivery. Just after the intubation she developed tachycardia (140 bpm). However, adequate arterial blood pressure was maintained. The baby was unexpectedly floppy and was intubated. After landiolol (a beta blocker) IV, ECG was diagnosed as atrial flutter of 4:1 conduction with saw-tooth waves. This change indicated that initial tachycardia was atrial flutter of 2:1 conduction. Cardioversion restored sinus rhythm (80 bpm) before extubation. It was postoperatively revealed that the patient's father had died of myotonic dystrophy (MD). She and her baby were also diagnosed with MD.

MD is a hereditary multisystem disorder. Fatal cardiac conduction abnormality can occur at an early stage of MD when the patients are not aware of their disorder [1]. There is a report of atrial fibrillation and shock developing after intubation during cesarean section under general anesthesia in an MD patient [2]. Our case also suffered atrial flutter after intubation. If MD is diagnosed preoperatively, regional anesthesia may be recommended for cesarean section because various risks including arrhythmia caused by general anesthesia can be avoided. Although the time available for preoperative evaluation is limited in urgent cesarean section, this case reconfirms the importance of careful family history.

Conflict of interest The authors have no conflict of interest.

References

1. Phillips MF, Harper PS. Cardiac disease in myotonic dystrophy. Cardiovasc Res. 1997;33:13–22.
2. Chung HT, Tam AY, Wong V, Li DF, Ma JT, Huang CY, Yu YL, Woo E. Dystrophia myotonica and pregnancy: an instructive case. Postgrad Med J. 1987;63:555–7.

Y. Shirasawa (✉) · K. Ishida · M. Matsumoto
Department of Anesthesiology, Yamaguchi University Graduate School of Medicine, Ube, Yamaguchi, Japan
e-mail: shirayun@yamaguchi-u.ac.jp