Panagiotis Flamée, J Clin Exp Cardiolog 2014, 5:3
http://dx.doi.org/10.4172/2155-9880.S1.021

OMICS Group Conferences
Accelerating Scientific Discovery

4th International Conference on
Clinical & Experimental Cardiology
April 14-16, 2014 Hilton San Antonio Airport, TX, USA

Safe single-dose administration of propofol in patients with established brugada syndrome

Panagiotis Flamée
UniversitairZiekenhuisBrussel, Belgium

Background: Propofol is an anesthetic drug with a very attractive pharmacokinetic profile, which makes it the induction agent of choice, especially in day-case surgery. Data on its potential proarrhythmic effects in patients with Brugada syndrome (BS) patients are still lacking. The aim of our study was to investigate whether a single dose of propofol triggered any adverse events in consecutive high-risk patients with BS.

Methods: All consecutive patients with BS having undergone an implantable cardiac defibrillator implantation under general anesthesia were eligible for this study. The anesthetic chart of each patient was reviewed, and the occurrence of malignant arrhythmic events as well as the need for defibrillation during induction and maintenance of anesthesia was investigated. Further monitoring of the patient comprised five-lead electrocardiogram (ECG), pulse oxymetry, and continuous carbon dioxide monitoring through side sampling from the ventilator tubes. Anesthesia was induced with propofol and sufentanyl. Injection of propofol occurred in a single-shot bolus-as often performed by most anesthetists-over a few seconds. Anesthesia was maintained with volatile anesthetics (sevoflurane or desflurane) in an oxygen-air mixture.

Results: From 1996 to 2011, 57 high-risk patients with BS (35 males; mean age: 43 ± 16 years) underwent an automated implantable cardioverter defibrillator implantation at our center using propofol as induction drug of general anesthesia. Three patients had a history of spontaneous type I ECG, three had aborted sudden death, and 51 had a history of recurrent or unexplained syncope. The induction dose ranged between 0.8 mg/kg and 5.0 mg/kg (2.2 ± 0.7 mg/kg). Only one case received propofol to maintain anesthesia. The surgical procedure involved an anesthetic period of 75 ± 25 minutes. No patient developed a malignant rhythm during induction and maintenance of anesthesia. All patients were then safely discharged from the postanesthetic care unit after 1 hour. No adverse events were noticed during the recovery phase. In our study, administration of a single-dose propofol in patients with BS was safe. Nevertheless, extreme caution is still recommended when conducting general anesthesia in patients with BS, especially if BS patients are sedated with propofol for longer periods.

panagiotis.flamee@me.com