CASE REPORT OF CARDIAC DYSARETHMIA FOLLOWING DENTAL PRESCRIPTION OF METRONIDAZOLE

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Abstract

Metronidazole is nitroimidazole antibiotic medication which has a specific activity against anaerobic bacteria and protozoa.
In cardiology, the QT interval represents electrical depolarization and repolarization of the ventricles. A lengthened QT interval is a marker for the potential of ventricular tachyarrhythmia.
Rare cases have been reported with QT prolongation in which metronidazole antibiotic had been used. The arrythmogenic properties of metronidazole is not yet clear.
This case reports a 10-year-old male child of 30 kg body weight with no history of any chronic illness or drug allergy came to the dental clinic with facial swelling, which was diagnosed as dental abscess. He was given oral metronidazole (500 mg 3 times/day for 5 days).
On the third day, he presented to the emergency department with palpitation, vomiting and then he collapsed. Cardiac Pulmonary Recitation (CPR) done and Electrocardiogram (ECG) showed prolonged QT corrected interval (QTc 480 ms).
Laboratory test including serum potassium, magnesium and liver functional tests were within normal. Metronidazole was immediately stopped and subsequently the ECG retained to normal.
In Conclusion, Metronidazole can potentiat QT prolongation. Further investigation should be carried out to assess its potential effect on QT interval and subsequent lethal arrhythmias.
The maximum pediatric dose should be reviewed.

BIOGRAPHY

Al Matrafi Badria has completed her BDS in 1991 in King Saud University in Riyadh KSA and AGD certificate in 2000 from university of south california USA. She is a consultant restorative in dentistry in Prince Sultan Military Medical City in Riyadh. She is a director of officer dental clinic and have a years of teaching and clinical supervision experience. She is a member of infection control team.