PP003 A RARE CASE OF PACEMAKER FAILURE IN A CHILD

B.Priya Lakshmy [1], Munusamy MM [2], Hung LC [3]

[1]Paediatric Emergency Fellow, Emergency Department, Hospital Kuala Lumpur
[2]Paediatrician, Cardiology unit, Paediatric Institute, Hospital Kuala Lumpur
[3]Consultant Paediatric Cardiologist, Paediatric Institute, Hospital Kuala Lumpur

INTRODUCTION

Pacemaker insertion in a paediatric patient is rare and only represent 1 % of all pacemaker insertions. Indications for pacing in children are divided predominantly into three main groups: congenital conduction abnormalities, acquired heart block post-surgery for congenital defect correction and sinus node diseases. We present a case of a child who presented with pacemaker failure.

CASE PRESENTATION

A 5 years old child presented to the emergency department (ED) with a brief history of possible seizure. He was found unresponsive with upper and lower limb stiffness associated with bowel and urinary incontinence and up rolling of eyeballs. He had never had seizures before and was otherwise well. He had a background history of congenital heart disease - Tetralogy of Fallot (TOF) and Pulmonary atresia ventricular septal defect (PAVSD). He developed complete heart block after multiple surgeries and required pacemaker insertion. On presentation to the ED, patient was alert but was noted to have heart rate of 50 bpm. He was otherwise haemodynamically stable.

An electrocardiogram (ECG) done in ED revealed a complete third-degree atrioventricular block and pacemaker impulse-QRS dissociation. He was admitted to the paediatric ward, diagnosed with pacemaker failure and transferred to a cardiac centre. He was noted to have myocardial fibrosis at the pacemaker lead site and underwent an epicardial ventricular lead reimplantation.

DISCUSSION

Pacemaker failure can present in many ways which include syncope, dizziness, palpitations, brady or tachyarrhythmias and even hiccoughs. Pacemaker malfunction can occur due multiple reasons ranging from equipment failure to post cardiac surgery scarring and even patient manipulation. As more infants with complex congenital cardiac defects are being successfully treated with surgical repair, the requirement for permanent pacing is likely to increase. Hence, the clinician has to be aware of this rare entity which might present more frequently in the future.