conferenceseries.com Clin Pediatr 2017, 2:4 (Suppl) DOI: 10.4172/2572-0775-C1-003 13TH EUROPEAN PEDIATRICS & PEDIATRIC NEUROLOGY CONFERENCE

August 31-September 02, 2017 | Prague, Czech Republic

Supraventricular tachycardia due to blunt chest trauma

James Haslam Swansea University, UK

Introduction: Blunt cardiac injury is more prevalent in children when compared with adults. It may cause commotio cordis or ventricular arrhythmias. Commotio cordis is the devastating consequence of otherwise innocent-appearing chest-wall blows, with sudden cardiac death resulting from projectiles striking the precordium. The spectrum of injuries includes damage to the great vessels, myocardial rupture or contusion, and valvular disruption. Pericardial effusions, conduction abnormalities and ventricular arrhythmias may also occur.

Case report: We report a case of atrial arrhythmia in a 7-year-old boy following blunt trauma to the chest. This previously healthy boy reported being unwell after he was hit by a football whilst playing. The impact was directly to the left anterior chest wall. A 12-lead electrocardiogram (ECG) recorded in primary care showed supraventricular tachycardia (SVT) at a rate of 225 bpm. On arrival to the hospital his heart rate and rhythm had reverted to normal. 24 hour Holter monitoring performed the week after was normal, recording brief periods of sinus arrhythmia, infrequent sinus tachycardia of gradual onset and no episodes of SVT or ectopic activity. A transthoracic echocardiogram excluded structural abnormalities. He was started on sotalol and is currently doing well with no sequelae from the injury. Final diagnosis of Wolf-Parkinson White syndrome was made following detailed investigations.

Conclusions: We hypothesise that the blow elucidated a previously unknown congenital accessory conduction pathway. We would like to raise the awareness of such possibilities amongst children and importance of detailed investigations to detect underlying predisposing pathologies.

james.a.haslam@gmail.com

Notes: