PP139 THE FLUTTERING HEART, IS IT LOVE OR ARRHYTHMIA: BELHASSEN-TYPE VENTRICULAR TACHYCARDIA

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INTRODUCTION

Belhassen-type Ventricular Tachycardia(VT), also known as idiophatic fascicular left VT is rare form of arrhythmia, and can be difficult to diagnose.The rhythm is often misdiagnosed as supraventricular tachycardia(SVT) with right bundle branch block(RBBB). We report a case of a young boy who presented to our centre with this type of VT.

CASE DESCRIPTION

A 15 years old boy presented with complaints of recurring palpitation for the past two days associated with chest discomfort and multiple episodes of vomiting during each attack of palpitation. Upon assessment he was alert and concious, with blood pressure of 108/70, pulse oximetry 99% on room air with respiratory rate of 18. ECG showed absence of P waves with regular, narrow complex tachycardia with a rate of 196 per minute.A diagnosis of stable SVT with aberrancy was made by the attending medical officer. Patient was given IV Adenosine 6mg,12mg then 12mg but failed to revert the arrhythmia. Subsequently, synchronised cardioversion with 50J and then 100J were attempted but failed too. Emergency physician was consulted and diagnosis of idiopathic left posterior fascicular VT was made. Patient was given IV Verapamil 2.5mg and this successfully reverted the rhythm back to sinus. ECG post IV verapamil showed sinus rhythm with rate of 75 beats/min and no acute ischemic change. Patient was hemodynamically stable and referred to electrophysiologist.

DISCUSSION

Belhassen-type VT is the most common idiopathic VT of left ventricle. The mechanism is re-entry due to an ectopic focus within the left ventricle. This is typically seen in young healthy adult without structural heart disease. Fascicular VT characteristically responds to Verapamil. Differentiating fascicular VT versus SVT with aberrancy is a diagnostic challenge due to its special ECG features that is unlike other form of VT, has shorter QRS duration and shorter RS interval. However, it is the utmost important to differentiate wether the rhythm is ventricular or supraventricular in origin, as erroneously treating VT as though it was SVT could precipitate hemodynamic collapse and cardiac arrest.

CONCLUSION

Diagnosing wide complex tachycardia is difficult because differential diagnosis includes variety of SVT. When in doubt, treat as VT.

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