

**PP067 A CASE OF A MISTAKEN
IDENTITY - IDIOPATHIC
FASCICULAR LEFT VENTRICULAR
TACHYCARDIA (ILVT)**

Siti Nur Athirah MH¹, Muhammad Hafiz AR¹,
Ahmad Suhailan M¹, Farina MS¹

¹ *Institut Jantung Negara, Kuala Lumpur,
Malaysia.*

INTRODUCTION:

We report a case of a 33-year-old male with Idiopathic Fascicular Left Ventricular Tachycardia (ILVT).

CASE REPORT:

A 33 years-old man complained of palpitation. He denied having chest pain, shortness of breath or syncope. He was normotensive but his heart rate was 170 bpm. His electrocardiograph (ECG) showed regular wide complex tachycardia, which was not reverted with intravenous adenosine. Intravenous infusion of amiodarone was commenced and patient subsequently developed hypotension. He was cardioverted to sinus rhythm and admitted for radiofrequency ablation therapy.

DISCUSSION & CONCLUSION:

Approximately 10% of cases of ventricular tachycardia (VT) occur in the absence of structural heart disease. They are termed as idiopathic VT. Majority of idiopathic VT arises from the right ventricle. The most common type of idiopathic VT arising from the left ventricle is Idiopathic Fascicular Left Ventricular Tachycardia (ILVT). The mechanism is re-entrant tachycardia due to an ectopic focus within the left ventricle. The ECG features of ILVT include: 1) Monomorphic ventricular tachycardia, 2) QRS duration narrower than other forms of VT (100-140 ms), 3) Right bundle branch block (RBBB) pattern, and 4) Axis deviation depending on anatomical site of re-entry circuit. Our patient had RBBB morphology and left axis deviation (LAD), which indicates the anatomical location of the re-entry circuit arises close to the left posterior fascicle. Thus, he had a posterior fascicular VT. This ECG rhythm can be mistaken for supraventricular tachycardia (SVT) with RBBB. ILVT is often unresponsive to adenosine, but characteristically responds to verapamil. Catheter ablation has been successful in curing ILVT. Our patient's arrhythmia would have been terminated with verapamil, without the need for cardioversion, if the initial diagnosis was made correctly. Physicians should be aware of the ECG characteristics of ILVT, to make the correct diagnosis and institute the proper treatment.