**MANAGING SUPRAVENTRICULAR TACHYCARDIA WITH WOLFF-PARKINSON-WHITE SYNDROME IN PREGNANCY: A CASE REPORT AND CLINICAL INSIGHT**

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| **Introduction:** Pre-excitation syndrome in pregnant patients is rarely reported in Malaysia. Without proper management, it can lead to life-threatening arrhythmia which may be harmful and detrimental to both the mother and the foetus. We report a case of a pregnant woman with Wolff-Parkinson-White (WPW) syndrome presented to our centre with supraventricular tachycardia (SVT).  **Case Report:** A 35-year-old female at 25 weeks of pregnancy, with underlying WPW syndrome, presented to the emergency department with sudden onset of palpitation and dyspnoea for one day. Her electrocardiogram (ECG) showed regular wide complex tachycardia (WCT) with a heart rate of 200 bpm. Carotid massage was performed but the cardiac monitor showed persistent tachyarrhythmia. Valsalva manoeuvre was attempted and the patient reverted to sinus rhythm. Delta waves were seen on the repeated ECG. She was admitted for observation before being transferred to a cardiac centre. The electrophysiological study revealed the presence of a right lateral accessory pathway. Radiofrequency ablation (RFA) with zero fluoroscopy was performed as she had multiple admissions for maternal tachycardia. The procedure was successful, as evidenced by the absence of delta waves on the ECG after the procedure. She was discharged well the next day.  **Discussion:** Physiological and hormonal changes during pregnancy predispose patients with pre-excitation syndrome to recurrent paroxysmal tachyarrhythmias. SVT can occur in patients with pre-excitation syndrome due to either orthodromic or antidromic atrioventricular re-entry tachycardia (AVRT). Our patient had antidromic AVRT as her ECG showed regular WCT. If left untreated, it may lead to cardiac problems and obstetric and foetal complications. A systemic review demonstrated that pregnant patients with pre-excitation syndrome had a higher rate of caesarean section. Most cardiologists will suggest RFA in these patients after delivery due to the risk of foetal exposure to ionizing radiation. However, with the radiation-reduction technique, RFA can be done during second trimester of pregnancy onwards, if patients have a high risk of tachyarrhythmia.  **Conclusion:** Pre-excitation syndrome may result in life-threatening tachyarrhythmia during pregnancy and delivery. Early detection will benefit the patient greatly, with RFA being the choice of treatment especially if the patient wishes to have another child in the future. |

**Keywords:** Pre-excitation syndrome, pregnancy, supraventricular tachycardia.