

# WORLD HEART CONGRESS

May 22- 24, 2017 Osaka, Japan

## Concealed accessories pathways presenting with recurrent orthodromic atrioventricular reentrant tachycardia in young children: To ablate or not? (A Case Report)

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**Introduction:** Palpitations occasionally foreshadow serious underlying cardiac event for adults. In children, however, they typically arise from physiologic stimuli such as fever, exercise, anxiety or anemia rather than life-threatening causes (eg. arrhythmia) therefore, causing frequent misdiagnosis on its underlying cause.

**Case description:** An 11 year-old girl was presented to ER with sudden palpitation since 5 minutes ago after woke up. There were no complaints of syncope, dizziness, chest pain and dyspnea. Prior history of normal vaginal birth, no delayed of crying and cyanotic was noted. No prior family history of premature CVD. Her mother admitted she had recurrent ER visit due to palpitation despite good compliance of verapamil 40 mg BID. On physical exam, she was hemodynamic stable without any sign of heart failure and unremarkable heart examination. ECG monitor showed an orthodromic AVRT, with rate of 166 bpm. Rhythm converted to sinus rhythm after amiodarone 150 mg IV bolus. Normal chest x-ray and echocardiography were done. EP study indicated postero-lateral-anterior and right postero-septal accessories pathways. An RF ablation was successfully done. Patient was discharged and given amiodarone 200 mg OD. During 6-months follow up, there were no palpitations nor dyspnea, patient clinically stable.

**Findings:** Rapid assessment in ER should be done in children with palpitation, including ECG monitor. AVRT occurred due to the presence of AV bypass tract which may happen at rest, it accounts for approximately 80% of all cases of PSVT. In clinical practice, clinician might prefer medical therapy over ablation, especially in children due to parental fear. However, successful rate with AVRT ablation is 93.3%, with 3.3% of recurrence rate. Ablation substantially improves quality of life and reduces costs over drugs therapy in AVRT patients.

**Conclusion:** Ablation is an effective and safe method over drugs therapy in young children with AVRT.

### Biography

Evan Hindoro works as an Internship Doctor in Belitung Timur General Hospital. After graduating as a Medical Doctor in 2016, he embarked to enrich his skills and knowledge in Cardiology by working as a Research Assistant at the National Cardiovascular Centre Harapan Kita (NCCHK), Indonesia. Beside his responsibility as a Medical Doctor, he filled up his days with basic research training and participating in workshops. His credibility in medical research has been proven in several publications, both local and international journals. In 2015 his papers, titled "Fractional Flow Reserves: Nurturing a functional perspective in angioplasty" and "Routine thrombus aspiration in primary percutaneous coronary intervention: Is it still necessary?" have been published in European Heart Journal Supplement. He is currently working on a coronary artery diseases registry in the Departement of Cardiology, Siloam Hospital Lippo Karawaci, Tangerang, Indonesia.

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