

PP060 ‘MY HEART RAN, SLOWED DOWN AND FROZE’: A CASE OF YOUNG SICK SINUS SYNDROME

Norzhafarina Hani¹, Alzamani Idrose¹

¹*Hopital Kuala Lumpur, Kuala Lumpur, Malaysia*

INTRODUCTION:

Sick sinus syndrome is usually diagnosed among elderly. We present such a case in a rather young patient.

CASE REPORT:

28-year-old gentleman presented with a history of recurrent syncopal attack preceded by palpitation for two days. He had a past history of palpitations since he was 15 years old but defaulted treatment. Upon arrival, patient was conscious. He was bradycardic but other vital signs are stable. Patient had intermittent episodes of syncopal attack in the emergency department. Cardiac monitor during the syncopal attacks showed ventricular standstill. Electrocardiogram showed sinus pause and high grade atrioventricular block with, left ventricular hypertrophy and ventricular standstill. There were few episodes of hypotension. Electrolytes were normal. Transcutaneous pacing was applied with the output set at 90mA and rate 70 bpm. The ECG showed electrical capture with increased heart rate but patient still had brief episodes of syncopal attack. Bedside Focused Cardiac Ultrasound showed mechanical capture was not achieved. Subsequently, transvenous pacing was applied and patient had resolution of symptom. Diagnosis of sick sinus syndrome attributed to structural heart disease was made.

DISCUSSION & CONCLUSION:

This is a rare case of sick sinus syndrome occurring in a young man. Temporary cardiac pacing is used to treat sick sinus syndrome but a permanent pacemaker is required. Electrical capture does not equate mechanical capture. Clinical improvement and bedside echo could help ascertain this. The electrical capture will result in QRS complex with T wave after each pacer spike, while mechanical capture will cause improvement in patient condition and palpable peripheral pulse in unconscious patient. Transvenous pacing is the best option to provide temporary pacing as it well tolerated and can be applied on extended period of time.