

ABSTRACT: ORAL PRESENTATION 01

COMPLEX CONGENITAL HEART DISEASE: A RARE CASE OF SITUS INVERSUS WITH ISOLATED LEVOCARDIA

Ong Aaron Hean Jin¹, Toh Shereen², Tamim Muhammad², Mat Nor Norazrulrizal¹, Koon Ket Sia¹

1. Tuanku Fauziah Hospital, Perlis, Ministry of Health, Malaysia

2. Penang General Hospital, Pulau Pinang, Ministry of Health, Malaysia

Introduction: Situs inversus with isolated levocardia (left-sided cardiac apex) is rare and is almost always associated with severe congenital heart disease with guarded prognosis. It has a reported incidence of 1:22,000 in the general population and accounts for 0.4-1.2% at all congenital heart diseases. The prognosis is poor, with 5 year survival rate of 5-13% from birth. **Case Report:** A 22-year-old woman with underlying complex cyanotic congenital heart disease was admitted for hyperviscosity syndrome with superimposed pneumonia. She has complex congenital heart disease (common atrium, univentricular heart, transposed great arteries and pulmonary atresia) and had undergone right-sided modified Blalock-Taussig shunt surgery at the age of 2. She was found to have situs inversus with levocardia, on radiological imaging. She was treated with intravenous antibiotics and therapeutic venesection, recovering back to baseline condition. **Discussion/ Conclusion:** Situs describes the position of the cardiac atria and abdominal viscera relative to midline. Situs solitus is the normal position while situs inversus refers to mirror-image placement of those organs. Situs inversus is almost always associated with dextrocardia (right-sided apex beat) and is linked to a 3-5% incidence of congenital heart disease. Situs inversus with levocardia is rare and almost always associated with congenital heart disease. Cyanotic congenital heart disease is associated with secondary polycythaemia. The treatment is venesection, resulting in improved blood flow and oxygen delivery. With the advancement in the field of paediatric cardiology, there will be an increase in adult survivors with complex congenital heart disease. Potential long term complications should be anticipated and treated accordingly.