Deformity Correction Surgery in Adolescent Idiopathic Scoliosis-Our Early Experience

Ed Simor Khan Mor Japar Khan\textsuperscript{1}, Rajandra Kumar A/L Karupiah\textsuperscript{1}, Muhammad Wafiuddin Ahmad\textsuperscript{2}, Ahmad Faizal Roslan\textsuperscript{2}, Muhammad Jasfizal Jasni\textsuperscript{3}, Zamzuri Zakaria\textsuperscript{1}

\textsuperscript{1}Department of Orthopaedics, Traumatology and Rehabilitation, Kulliyyah of Medicine, International Islamic University Malaysia
\textsuperscript{2}Surgical Based Department, Fakulti Perubatan & Sains Kesihatan, Universiti Malaysia Sabah
\textsuperscript{3}Department of Orthopedic, Universiti Pertahanan Nasional Malaysia

Presenter: Ed Simor Khan Mor Japar Khan

Introduction: Adolescent Idiopathic Scoliosis (AIS) is the most common spinal deformity among teenage girls. It is defined as three dimensional lateral curvature in coronal plane of more than 10 degrees. For those indicated, early surgical intervention allows better surgical correction due to flexibility of the spine during teenage years, hence good functional outcome and better cosmesis can be expected. Materials and Methods: We reported our early experience in managing five patients surgically using the Posterior Spinal Instrumentation and fusion. Pre-operatively patients were examined at IIUM Medical Centre spine clinic, all necessary investigations were carried out. Thorough explanation was done to patient and parents regarding procedure, risk and benefit. All patients were treated using same surgical technique. Neuromonitoring were used throughout the whole surgery until skin closure. All patients were hospitalised around one week. Post-operatively patients were follow-up at two weeks, six weeks, three months, and every six months thereafter. Result: It is important for clinicians to identify patients with AIS as early detection and timely treatment will change the natural history of curve progression. Conclusion: Surgical intervention when necessary will be easier and with less risk of complications when surgery was carried out during teenage years as the spine is more flexible and the deformity is less severe.