SPONDYLOLISTHESIS IN ADOLESCENT: GETTING HER TO WALK AGAIN

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Introduction: Spondylolisthesis incidence is 6-8% in young patients and often are symptomatic. In a young group of patient most common cause are defects or hypoplasia of pars and facet.

Discussion: A 12-year-old girl presented to us with worsening low back pain with right lower limb radicular pain. She finds walking and change of position agonizing and difficult. Neurology of both lower limbs are intact but she has a positive straight leg test on both lower limbs, worse on the right side. She was diagnosed with spondylolisthesis L5/S1 with bilateral radiculopathy and underwent spinal stabilization, bilateral neuroforaminotomy and neurolysis. Postoperatively her pain improved significantly and neurology has remained intact.

Conclusion: Risk factors in developing spondylolisthesis are genetics, which may have a role in abnormal or hypoplastic pars and facet, certain sports activity and trauma. Treatment direction is guided by the pain severity, disease progression, segment stability, severity of the listhesis itself and if there is any presence of neurological deficit. Neuroforaminotomy and neurolysis were performed for this patient. Treatment options are often initiated with conservative management by employing activity restriction, bracing and physiotherapy. In abnormal and hypoplastic pars and facet patients tend to have listhesis progression. Surgical treatment is offered when pain is not tolerated, significant listhesis progression and the presence of neurological deficit. Current literature review on surgical treatment favours stabilization with circumferential fusion compared to posterior fusion only. Method of reduction and stabilization has better union rate and sagittal alignment compared to in-situ fusion when performing spinal instrumentation and stabilization. Surgical intervention should be considered in a skeletally matured patient with worsening of signs and symptoms of spine disease.