

# Bilateral Pars Interarticularis Fracture Following Trauma in Children

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Spondylolysis<sup>1</sup> is a term used to describe anatomic defects in pars interarticularis with adjacent bone sclerosis. Spondylolysis in children as a result of a stress fracture is described in the literature, but spondylolysis following trauma is rare.

This is a case of a 9-year-old male obese child presenting with a complaint of back pain following a history of a road traffic accident. On examination, there were no obvious focal neurological deficits. Computed tomography (CT) lumbar spine showed bilateral par interarticularis fracture of the L5 vertebra (Fig. 1). The child was managed conservatively with analgesics and adequate rest. There was relief in back pain after 1 month.

The case we are discussing here had a type IIA<sup>2</sup> (isthmic-lytic type) spondylolisthesis according to Wiltse classification. It occurs secondary to stress fracture which is attributed to repeated extension and/or twisting motions. In the pediatric age<sup>3</sup> group, this may occur in athletes (especially gymnasts or football players). Here the child gave a history of a road traffic accident resulting in bilateral pars interarticularis fracture.

Russell et al.<sup>4</sup> had reported a single case of post-traumatic spondylolysis in a 32-year-old Japanese lady following history of fall. Post-traumatic bilateral par interarticularis fracture causing spondylolysis in the pediatric age group is still a rare entity. Spondylolysis with undisplaced pars fractures in children can be managed conservatively with adequate bed rest and analgesics. However, in post-traumatic displaced bilateral pars fractures, a further detailed evaluation is warranted.

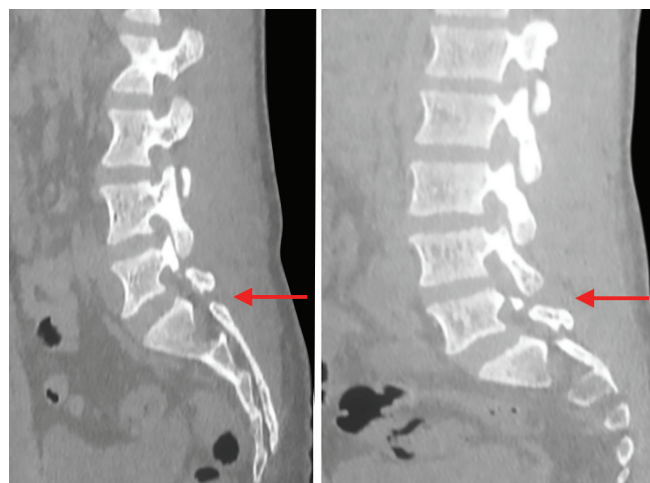
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**Fig. 1.** Sagittal CT image showing pars fracture