

Diastematomyelia: A rare entity with duplication of the spinal cord.

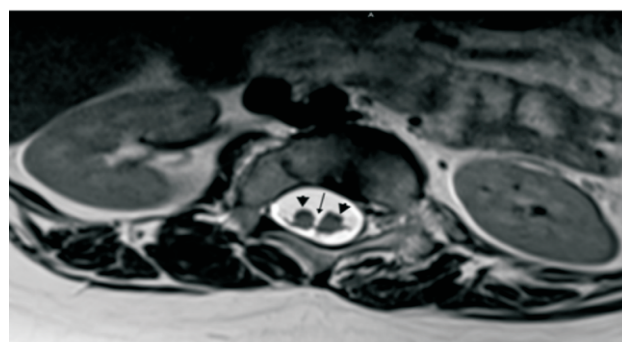
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A 7-year-old boy presented with scoliotic deformity since birth, with a hairy skin tag on his back. Multiple segmentation anomalies were observed on plain radiograph. MRI was subsequently performed to evaluate the status of the spinal cord. T2 weighted-axial image reveals two hemicords (arrow heads) with a CSF cleft between them (black arrow).

Diastematomyelia is a rare abnormality of the spinal canal characterized by a split spinal cord with or without a bony or fibrous septum. The abnormality most commonly occurs between the T9 and S1 vertebral bodies and is rare within the cervical region.¹ Patients may be asymptomatic at birth, but can develop bowel and bladder dysfunction, motor and sensory difficulties, and progressive pain² over variable fields.

Two types have been described: Type 1 deformity is characterized by an extradural bony spur that produces two separate dural sacs with two arachnoid sacs for each separate hemicord. This is the type that usually produces symptoms. Patients are said to have a Type 2 diastematomyelia if there is one dural sac surrounding the split cord. While there is no bony spur, these patients can have fibrous septa associated with the split cord. Patients with this type of abnormality are usually asymptomatic.³ Spine radiographs may be the first imaging modality to identify an abnormality in patients with diastematomyelia. In these cases, the radiograph may show widening of the spinal canal, a bony ridge at midline, scoliosis and other vertebral anomalies. Currently, CT or MRI is used to confirm the diagnosis. CT scans can show a bony septum and separation of the cord. MRI shows the cord separation and dural sacs in greater detail but may not be as beneficial



as CT for the bony abnormalities.⁴ Prenatal or neonatal ultrasound has been used to identify the split cord as well as the echogenic formation which can indicate a bony spur.²

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