

Traumatic Brown-Séquad Syndrome in Paediatric

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INTRODUCTION:

Spinal cord injuries are rare in paediatric trauma.¹ Brown-Séquad syndrome is a condition involving incomplete spinal cord injury, with ipsilateral motor and proprioception loss, contralateral pain, and decreased temperature. We present a rare paediatric case with Brown-Séquad syndrome following high velocity trauma.

REPORT:

A 9-year-old girl sustained closed subtrochanteric fracture left femur following a motor vehicle accident. Neurological examination demonstrated left lower extremity paresis and moderate paralysis of the right upper and lower extremities with muscle power grade of 2 to 3 corresponded to a cervical injury. Further examination revealed loss of temperature sensation at left lower limbs, proprioception was intact. MRI showed disruption of anterior atlanto-occipital membrane with prevertebral hematoma and short segment cord oedema at the level of C2. Patient was given IV Dexamethasone tapering down dose for Brown-Séquad syndrome and cervical spine was immobilized with semi rigid collar. Patient had neurological recovery at the end of 3 weeks.

CONCLUSION:

Brown-Séquad syndrome is uncommon especially in paediatric age group. Early recognition, thorough clinical examination and supported by radiological findings are utmost important to diagnose and manage this condition. Patient with Brown-Séquad syndrome have good prognosis. Hence, proper rehabilitation process is important to determine patient recovery.

REFERENCES:

1. M. Komarowska et al., Brown-Séquad syndrome in a 11-year-old girl due to penetrating glass injury to the thoracic spine, Eur J Orthop Surg Traumatol. 2013 Nov;23 Suppl 2(Suppl 2):S141-3. doi: 10.1007/s00590-012-1050-8. Epub 2012 Jul 19. PMID: 23412183; PMCID: PMC3825641.