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Maximising Functional Recovery in Cervical Hemivertebra through Physiotherapy: A Case Report

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ABSTRACT

Hemivertebra is a congenital failure in the formation and fusion of vertebral body ossification nuclei, resulting in the development of one side of the vertebral body. Its incidence is estimated at ~0.3 per 1000 live births. Hemivertebra of the cervical spine is even rarer and has been associated with cervical scoliosis and instability, neck pain, and torticollis. Congenital cervical hemivertebrae often remain asymptomatic unless triggered by a traumatic event or an increase in biomechanical stress. Physiotherapy interventions can play a vital role in helping patients recover from the mechanical strain on the cervical neuromuscular structure.

The present case involves a 19-year-old student who was referred for physiotherapy with complaints of neck pain (non-radiating) lasting for one week. The intensity of the pain had been fluctuating, with periods of increase and decrease, over the past year, occurring in 2–3 episodes per month. An X-ray revealed the presence of a right congenital cervical hemivertebra at the C5-C6 level.

Physiotherapy protocol focused on reducing pain, improving mobility, and enhancing spinal stability. Treatment includes manual therapy, stretching exercises and strengthening exercises, Postural correction and ergonomic advice were provided. Physiotherapy plays a crucial role in managing congenital cervical hemivertebrae by alleviating pain, improving range of motion, and enhancing spinal stability. Through targeted exercises, physiotherapy helps reduce symptoms and prevent further complications, significantly improving the patient's quality of life.

Keywords: Congenital, Hemivertebrae, Neck pain

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