Cervical spinal canal compromise in a 14-year-old girl with hereditary multiple exostoses

Amar Patel · Mihir M. Thacker

Received: 5 April 2010 / Revised: 11 May 2010 / Accepted: 2 June 2010 / Published online: 26 June 2010
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This report highlights the importance of advanced imaging in the case of a 14-year-old-girl with multiple hereditary exostoses who presented with painful restriction of neck motion. CT scans show an osteochondroma arising from the posterior elements of C2 causing cord compression (Fig. 1).

Multiple hereditary exostoses is an autosomal-dominant disorder characterized by the development of multiple cartilage-capped lesions in rapidly growing bone. The cervical spine represents 80% of spine involvement with C2 being the most commonly affected vertebra [1]. Most osteochondromas arise from the posterior elements of the vertebra and do not encroach on the spinal canal. A recent study reported a 68% prevalence of spinal involvement with 27% having lesions encroaching on the spinal canal in 44 patients with multiple hereditary exostoses [2]. Some patients may develop acute neurological deficits. A treating physician's awareness of this high prevalence is essential.

References

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A. Patel · M. M. Thacker (✉)
Department of Orthopaedic Surgery,
Alfred I. duPont Hospital for Children,
1600 Rockland Road,
Wilmington, DE 19803-3607, USA
e-mail: mthacker@nemours.org

Fig. 1 CT scans (axial and sagittal cuts)