Horner Syndrome and Thoracic Disc Herniation

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A 45-year-old woman presented with acute Horner syndrome associated with several weeks of midscapular pain radiating to the left upper extremity. The physical examination showed a left-sided Horner syndrome (Figure 1A) and signs of an ipsilateral radiculopathy of the first thoracic root with numbness and weakness in the T1 distribution. By computed tomography angiography, a dissection of the internal carotid artery was excluded. Spinal magnetic resonance imaging (MRI) demonstrated a pronounced disc herniation at the T1-2 level (Figure 1B and C). A laminoforaminotomy via a posterior approach was performed resulting in complete recovery.

This case illustrates several points.¹ First, even in the presence of associated radiating midscapular pain, the acute onset of a new Horner syndrome must prompt urgent diagnostic evaluation to rule out carotid artery dissection.^{2,3} Second, by careful clinical examination a plausible working diagnosis can be elaborated.^{1,2} Horner syndrome combined with hand weakness and numbness in the medial forearm pointed to a radiculopathy of the first thoracic root.⁴ By history and MRI, the differential diagnosis could be markedly narrowed to disc herniation at T1-2 level. Progression of the herniated disc compressed the hitherto spared preganglionic fibers of the descending sympathetic pathway leading to the Horner syndrome, which was finally alarming enough for the patient to seek emergency care.

Authors' Note

Patient's consent was obtained.

Declaration of Conflicting Interests

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Figure 1. A, The patient presented in the emergency department with an acute left-sided Horner syndrome combined with signs and symptoms of a radiculopathy of the first thoracic root. B, Sagittal T2-weighted magnetic resonance imaging (MRI) shows a disc herniation at the T1-2 level (white arrow). C, Axial T2 weighted magnetic resonance imaging (MRI) shows a left-sided lateral disc herniation obliterating the intervertebral foramen at T1-2 (white arrow). (MRI, courtesy of PD Dr Dinkel, Department of Radiology, Municipal Hospital Landshut, Germany).

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