Degenerative cervical myelopathy

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1 Degenerative cervical myelopathy is the most common cause of nontraumatic impairment of the spinal cord in adults[1]

Degenerative cervical myelopathy comprises age-related degenerative pathologies of the cervical spinal column that lead to myelopathy from compression of the spinal cord. These include osteoarthritic degeneration (cervical spondylosis) and ligamentous aberrations (ossification of the posterior longitudinal ligament or ligamentum flavum).[1] Although high-quality epidemiologic data are still needed, a recent literature review reported a prevalence of 605 per 1 000 000 population.[1] A recent international multicentre trial (AOSpine) involving 479 patients who were undergoing treatment reported that about two-thirds (n = 310) were male, with a mean age of 56 years.[2]

2 Patients most commonly report bilateral neurologic symptoms

About 75% of patients report clumsy hands and over 80% report unsteady gait and/or upper extremity sensory changes such as shock-like paresthesias with neck flexion (Lhermitte sign).[3] Symptoms generally progress either steadily or with quiescent periods punctuated by rapid neurologic decline.[1]

3 Delays in diagnosis are common

Patients most commonly present initially to a primary care provider. Delays in diagnosis are common, often exceeding two years and five physician visits.[4] Degenerative cervical myelopathy may be misdiagnosed as a peripheral nerve condition, such as carpal tunnel syndrome.[4] Physicians should check for signs of myelopathy, particularly in patients who report neck pain, or arm or hand numbness. Findings suggestive of myelopathy include brisk, deep tendon reflexes, an upgoing plantar reflex (Babinski sign), reflex contraction of the thumb induced by tapping the dorsal surface of the terminal phalanx of the middle finger (Hoffman sign), dysfunctional tandem gait or spastic motor weakness.[3,4]

4 Clinical evidence of myelopathy should prompt magnetic resonance imaging

Cross-sectional imaging of the cervical spine is necessary for diagnosis; however, clinicoradiographic correlation is needed, given the high prevalence of asymptomatic degenerative changes in the spine.[5]

5 Patients with radiographic confirmation of spinal cord compression should be referred to a spinal surgeon; expeditiously if myelopathy is evident

Surgery is increasingly the standard treatment for degenerative cervical myelopathy.[2] The AOSpine study reported that surgical intervention improves neurologic and functional status, regardless of severity.[2]

References

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