Clinical picture

Interosseous muscle atrophy

A 57-year-old woman presented with progressive upper back pain with numbness and tingling sensation over left forearm in the past 9 months. She had undergone mastectomy due to breast cancer 9 years ago and her disease relapsed 2 years ago. The physical examination revealed remarkable atrophy of interosseous muscle of left hand (Figure 1A, black arrow) and loss of thenar/hypothenar eminence (Figure 1B, arrow head). The whole-body bone scan showed multiple bony metastases (Figure 1C) and the spinal magnetic resonance imaging (MRI) scan showed multiple enhancing lesions involving the cervical and thoracic vertebral bodies from C5–T7, which cause cervical spinal cord C7–T1 compression (Figure 1D, white arrow). The patient subsequently received local spinal irradiation, monthly zoledronate infusion and oral analgesic treatment with gradual improvement of her neuropathic pain.

Compressive cervical myelopathy from spondylosis or disc herniation characteristically presents with progressive muscular spasticity, weakness and sensory deficit. It also results in focal and slowly progressive amyotrophy. Skeletal metastases are most commonly seen in breast, lung, prostatic cancers and multiple myeloma, and neuropathic symptom will occur when spinal cord and vertebra are involved. Accurate diagnosis of malignancy-related

Figure 1. (A) Remarkable atrophy of interosseous muscle of left hand on physical examination (black arrow). (B) Loss of thenar/hypothenar eminence of left hand on physical examination (arrow head). (C) Multiple bony metastases of the cervical and thoracic spines were found on the whole-body bone scan. (D) Compression of cervical spinal cord C7–T1 was shown on the spinal MRI scan (white arrow).
cervical myelopathy will depend on detailed physical and neurological examinations. Early recognition and prompt treatment will reduce inevitable neurologic sequelae.

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References