OSTEITIS DEFORMANS WITH SPINAL CORD COMPRESSION

REPORT OF THREE CASES

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Apparently, osteitis deformans occurred in antiquity. Paleontologic evidence exists which, it is claimed, reveals manifestation of the disease in fossil apes. Some observers have felt that preserved specimens of prehistoric man show the characteristic alterations. It remained, however, for Paget to describe the disease as an entity.

Justifiable therapeutic pessimism usually attends the diagnosis of osteitis deformans. Specific therapy is not available and palliative treatment is unrewarding. However, a syndrome occasionally accompanies Paget’s disease that offers some hope of symptomatic relief for variable periods of time. This entity is spinal cord compression secondary to vertebral osteitis deformans. Three patients with the disease, manifesting signs of progressive spinal cord involvement, have been under our care and surgical decompression was accomplished in each by laminectomy.

REPORT OF CASES

Case 1. A 66-year-old white male was admitted to the hospital complaining of progressive weakness of both legs with burning pain of 2 years’ duration.

Examination disclosed a “step-page” gait withatrophy of the musculature of the left leg. There was no definite sensory level although the joint-muscle-tendon sense was lost to the iliac crest. Roentgenograms revealed the characteristic changes of osteitis deformans in the dorsal spine and right hip joint (Fig. 1).

Since Pantopaque® myelography delineated a complete block of the subarachnoid space at the 8th dorsal intervertebral disc, a decompressive laminectomy was performed. The laminae

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were extremely thick and vascular (Fig. 2). The patient remained asymptomatic for 1 year when the syndrome again appeared. Laminectomy was again performed at the same level and the pathology observed was similar. However, postoperatively, there was little improvement and the patient remains confined to a wheelchair 3 years after surgery.

Case 2. A white male, aged 65 years, had fallen from a stepladder 1 year prior to admission. Since that time he had noted numbness of both feet. Gradually, weakness of both legs appeared and on admission he was paraplegic with loss of all sensory modalities below the 7th dorsal dermatome.

After demonstration of an obstruction opposite the 5th dorsal vertebral body by myelography, decompression was undertaken. The laminae were 5 cm. in thickness and bled profusely.

Convalescence was remarkable in that within 6 months he was playing golf regularly. Five years later, however, pain and weakness of the legs reappeared. Radiographs revealed extensive osteitis deformans of the skull (Fig. 3) and the entire vertebral column. Myelographic block was relieved by decompression and the pathology was similar to that previously observed (Fig. 4). The patient is again walking unaided.

Case 3. A 34-year-old white male had sudden development of progressive weakness of both legs 6 months prior to hospital entry.

Examination disclosed a left "foot drop," weakness of all motions of both lower extremities, hypoactive patellar and Achilles reflexes, and a level of sensory impair-