CASE REPORTS

SCIATICA CAUSED BY TUMORAL CALCINOSIS

A CASE REPORT

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(Received for publication November 20, 1951)

The purpose of this paper is to draw attention to sciatica caused by tumoral calcinosis. It is a rare condition of obscure etiology marked by benign, lobulated, fluctuating, calcified cystic masses in the region of gliding surfaces or bursae. These masses are usually not accompanied by pain, tenderness or limitation of motion. However, in the patient reported the mass of tumoral calcinosis pressed on spinal nerve roots and was the apparent cause of sciatic pain. Removal of the mass was followed by relief of pain.

CASE REPORT

A 59-year-old woman, referred by Dr. Charles Lloyd, complained of pain for 2 years in the left buttock and down the back of the left lower limb to the ankle. One year before we saw her, x-ray studies had revealed a calcified cauliflower-like mass in the left lumbosacral region which measured about 5×3 cm. (Fig. 1). Similar smaller masses were present over the right greater trochanter and in the region of the left subdeltoid bursa. She had never taken vitamin D before these films were made. Subsequently the patient took 2000 units of vitamin D daily for 6 months. The left sciatic pain became progressively more severe several months before admission. It was unaffected by coughing or sneezing. There was neither paresthesia nor difficulty with sphincteric control.

Physical Examination. There was marked impairment of flexion of the lower portion of the lumbar spine with moderate bilateral muscle spasm. The left Achilles reflex was markedly diminished. Straight-leg-raising was permitted to 100° on the right side and to 90° on the left side with pain referred to the left sacroiliac region in each case. There was no weakness of the muscles of the lower limbs and no tenderness along the courses of the sciatic or tibial nerves. Marked impairment of pain sensation was present over the posterior aspect of the left thigh and calf, greater on the lateral than on the medial aspect. This hypoalgesia indicated more involvement in the 1st than in the 2nd sacral dermatome. Vertebral tenderness was sharply localized to the left of the spinous process of the 5th lumbar vertebra. All changes of position were extremely painful. Jugular compression did not increase the pain. Speed of movement of toes was normal. There was no tenderness near the right greater trochanter.

Laboratory Data. Serum calcium was 10.4 mg./100 cc. (normal 9.5–11.0 mg.); total serum phosphorus was 5.3 mg./100 cc. (normal 3–5 mg.); complete blood count was normal; urinalysis was normal except for a trace of albumin.

Roentgenographic Examination (Figs. 2 and 3). Films showed that the cystic calcification was larger than at the original examination. Both anteroposterior and lateral films suggested that the progressive calcification was within the spinal canal, with some calcareous material lying among the nerve roots.

Operation, August 7, 1951. Exploration of the lumbosacral region on the left side revealed a multiloculated mass, lying posterior to and attached to the hemilamina and left transverse process of the 5th lumbar vertebra. There were dense adhesions to the overlying erector spine muscles. The cysts contained dry, whitish, cheesy material measuring, in all, 6×4×3 cm. The posterior surface of the left side of the sacrum, near the midline, was partially hollowed.
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Figs. 1 and 2. (Left) A-P view of lumbosacral spine showing irregularly calcified mass overlying the body of the 5th lumbar vertebra. (Right) A-P view taken 1 year later, showing progression of lesion particularly towards and across the mid-line.

Figs. 3 and 4. (Left) Lateral view of lumbosacral spine showing calcification both anterior and posterior to the subarachnoid space. (Right) Postoperative A-P view showing hemilaminectomy and removal of the bulk of the mass with, however, some scattered portions remaining behind.