Extraosseous extradural tuberculous granuloma simulating a herniated lumbar disc

Case report

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A 25-year-old man with left-sided sciatica, in whom the cerebrospinal fluid and x-ray films of the spine were normal, was diagnosed as having a L5-S1 disc prolapse. At surgery extradural, extraosseous granulation tissue was removed, which histologically proved to be a tuberculous granuloma.

KEY WORDS: intervertebral disc displacement · extraosseous extradural tuberculosis · tuberculous granuloma

Extraosseous extradural tuberculosis simulating a lumbar disc prolapse is extremely uncommon. Only one report was found, that of Decker, et al.3

Case Report

A 25-year-old man was admitted on February 19, 1970, for low backache and left-sided sciatica of 2 months' duration. The pain radiated through the gluteal region, posterior aspect of the thigh, posterior aspect of the leg, and lateral aspect of the foot into the little toe. Pain was aggravated by coughing, sneezing, and walking. There had been no recognized trauma to the lumbar spine.

Examination. The general condition of the patient was good. Lumbar lordosis was lost, and movements of the lumbar spine were limited. Straight leg raising was limited to 30° on the left side. Motor and sensory systems and reflexes were normal. Routine blood tests, x-ray films of the lumbar spine (Fig. 1), and the lumbar cerebrospinal fluid were normal. A diagnosis of L5-S1 disc prolapse was made, and the patient was treated conservatively without relief.

Operation. On March 17, 1970, a lumbar laminectomy was done. Exploration revealed grayish, vascular granulation tissue in the axilla of the left S-1 nerve root extending upward and downward in front of the nerve root. This material was removed completely. There was no disc prolapse at the L4-5 or L5-S1 spaces. The vertebrae and the posterior longitudinal ligament were normal. Histopathological study of the granulation tissue revealed tuberculosis (Fig. 2).

Postoperative Course. A search was made for the presence of tuberculosis elsewhere in the body. X-ray of the chest was normal. There was no evidence of tuberculosis in bones, joints, or lymph nodes. The patient was placed on antituberculous treatment and was discharged on April 10, 1970, com-
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-contained pus, and histologically was a non-specific granuloma; the diagnosis was confirmed by demonstrating acid-fast bacilli in the pus. The material in our case was granulomatous, and the tuberculous nature of the lesion was confirmed histologically.

There was no evidence of tuberculous infection elsewhere in the body. The CSF analysis was normal and not subjected to culture as the tuberculous etiology was not suspected before operation. It would also have been interesting to demonstrate the myelo-graphic defect in our case. But this procedure was not done as it is not the practice in our clinic to perform myelography routinely in all cases presenting with typical signs and symptoms of a herniated disc.  

Summary

A surgical case of extradural extraosseous tuberculous granuloma in a 25-year-old man simulating a herniated lumbar disc has been reported. A review of the literature revealed only one similar case.

Discussion

In the Department of Neurosurgery of King George Hospital, Visakhapatnam, 307 cases of lumbar disc syndrome have been treated surgically. The present case is the only one with extraosseous extradural tuberculosis.

Extraosseous extradural tuberculous granuloma is a well-defined entity. Dayananda Rao, et al., reported four cases and referred to the relevant literature. In those cases, the tuberculous granuloma was situated in the thoracic region, in the posterior extradural space. When in the lumbar region, as in the present case as well as that of Decker, et al., the tuberculous tissue was located in the anterior extradural space, producing a disc syndrome.

The lesion in the case of Decker, et al., contained pus, and histologically was a non-specific granuloma; the diagnosis was confirmed by demonstrating acid-fast bacilli in the pus. The material in our case was granulomatous, and the tuberculous nature of the lesion was confirmed histologically.

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Acknowledgments
We thank Dr. B. Shanmukheswara Rao, M.S., Superintendent, King George Hospital, Visakhapatnam, for permission to use hospital records. With pleasure we thank Mr. N. Subbarayan for secretarial assistance and Mr. B. Ramarao for the photographs.

References

Received for publication September 21, 1970. Address reprint requests to: Dr. S. Balaparameswara Rao, M.S., Professor of Neurosurgery, Andhra Medical College, Visakhapatnam, India.