FOREIGN-BODY GRANULOMA OF INTERVERTEBRAL DISC AND SPINAL CANAL

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R.L.B., 37-year-old white farmer, was admitted to the Eugene Talmadge Memorial Hospital Oct. 12, 1957 with a chief complaint of excruciating pain in the back and left thigh of 2 weeks' duration. The onset was sudden while lifting a heavy object. The pain radiated to the left thigh and foot, and had grown progressively more severe. The pain was intensified by coughing or sneezing.

Past History. Seven years prior to admission the patient had been injured in the left flank with a load from a shotgun. One pellet at that time had entered the abdomen and perforated the bowel in five places and finally lodged in the L2-L3 intervertebral space. The patient recovered and did well except for occasional mild pain in the back and slight weakness in the left leg.

Fig. 1. Anteroposterior and lateral films of lumbar spine. Note the metallic opacity within the L2–L3 intervertebral space and extending into the spinal canal.

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Examination revealed a well developed, well nourished white male who appeared to be the stated age. He was cooperative and mentally alert. The patient was bedfast and having a mild asthmatic attack at the time of examination. There was generalized tenderness of the abdomen with muscle guarding in both lower quadrants; no masses were palpated. Positive findings were confined to the abdomen, spine and lower extremities. The abdominal reflexes were absent bilaterally. In the lower extremities the deep tendon reflexes were grade III but symmetrical, and the Babinski response was absent. Straight leg raising was positive bilaterally with a positive Lasègue's sign on the left. There was severe spasm of the lumbar muscles bilaterally with generalized lumbar tenderness. No objective weakness was present, but the patient was unwilling to try to walk. There was hyperesthesia over the thighs, legs and feet bilaterally which was more disturbing over the left. Roentgenograms of the lumbar spine (Fig. 1) revealed a rounded metallic foreign body in the disc space at the posterior aspect. This foreign material projected into the spinal canal. The lumbar myelogram (Fig. 2) revealed a total block at the inferior aspect of the radiopaque area.

Operation. On Oct. 17, 1957 a total laminectomy of L2 and L3 was performed. There was minimal subluxation of L2 and L3. A mass was palpated anterior to the dura mater and cord which did not feel as firm as calcium. A left extradural exploration was performed, and approximately 4 cc. of material which had the appearance of pus exuded from the extradural space and from the intervertebral space. [Cultures were made of this and all were sterile.] As the space was further exposed, the character of the material changed and it was found to be a pasty, gray-white. This material was placed on a surgical sponge and roentgenograms were taken (Fig. 3). Comparison with the radiopaque thread in the sponge and with the previous films revealed that this material was similar to that seen on the scout spine films (Fig. 1). An attempt was made to remove all the shot, but the center was still too hard to crush. The material that was more soft, however, was removed from the spinal canal and intervertebral space, which gave adequate decompression of the cord.

Postoperative course was uneventful. The patient complained of mild discomfort for the first 48 hours. Flexion and extension films of the lumbar spine revealed a stable joint between L2 and L3. Neurological findings were within normal limits.

Repeated postoperative examinations in the out-patient department revealed no recurrence of pain in the lower extremity, numbness or weakness. He does have mid, low-back pain with any heavy lifting in a forward bent position or with driving a tractor for a prolonged period.