Intrasacral Ependymoma

Case Report

RAFAEL VARA-THORBECK, M.D., AND JULIÁN SANZ-ESPONERA, M.D.
Departments of Surgery and Pathology, Faculty of Medicine, Madrid, Spain

Ependymomas are the most common intramedullary tumors. They grow slowly and are usually situated in the medullar cone and filum terminale with an occasional intrasacral growth. The first case reported of this kind was that of Saxer in 1902. Foerster and Gagel reported three more cases, Mignani, Mayo, et al., and Wertheimer, et al., two. Thus the intrasacral localization of such tumors is unusual. Ependymomas showing the myxo-papillary form described by Kernohan are still more rare. The case we are reporting has both of these exceptional features.

Case Report

This 29-year-old man was admitted because of a 2-year history of enuresis with sneezing or coughing, weak penile erection, and delay in ejaculation. He also had noted anesthesia in the genitalia, perineum and perineal region, difficulty in starting defecation and micturition, and sporadic episodes of paresthesia in both legs.

 Examination. The patient had a saddle anesthesia, a positive right Babinski, and positive Chaddock signs, more marked on the left. Digital rectal examination revealed the existence of a tumor slightly indenting the posterior wall of the rectum. The radiographic study showed an almost complete destruction of the posterior arch of the fifth lumbar vertebra, affecting both pedicles and increasing the interpedicular distance. In the middle part of the sacrum, the osseous structure had disappeared, with disintegration of the outline of the sacral foramina around this mid-sacral area of lysis. There was a normal osseous band corresponding to the sacral winglets (Fig. 1 left). Myelography showed a bonnet-shaped block at L-3 with its concavity downward (Fig. 1 right).

Received for publication June 18, 1969.
Revision received December 4, 1969.
Fig. 1. Left: X-ray film of lumbosacral region showing destruction of L-5 and the middle part of the sacrum, with increase in the interpedicular distance. Right: Myelogram showing a bonnet-shaped block at L-3 with the concavity downward. Photograph also shows destruction of lamina of L-5.

Fig. 2. Photomicrograph of the tumor showing papillae with a monocellular border around a homogeneous axis. Cells have elongated eosinophilic cytoplasm. Kreyber's trichromic stain, ×80.

covered with cells usually distributed as a monocellular border around the axis, although occasionally several cells were grouped together. The cells had an elongated eosinophilic cytoplasm; the nuclei were spherical, and chromatin masses adhered to the nuclear membrane (Fig. 3 left). The osseous zones studied showed disorganization of their trabeculae and marrow, due to a neoplastic infiltration that maintained the papillary structure (Fig. 3 right).

Discussion

Ependymomas of the filum terminale and cauda equina are relatively rare. Our case concerned a giant ependymoma, according to Foerster's classification, as it had a weight of 90 gm and extended from the level of L-2 to that of the third sacral vertebra; its most important growth was intrasacral. The resulting compression and infiltration had caused an osteolysis of the posterior arch.