Giant Intramedullary Epidermoid Extending from the Brain Stem to the Upper Thoracic Spinal Cord

Beyin Kökünden Üst Torasik Spinal Korda Uzanan Dev İntramedüller Epidermoid

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INTRODUCTION
Epidermoid cyst occurring in the spinal cord is rare, comprising 0.6–1.1% of spinal tumors. Spinal epidermoid cysts are uncommon and most of the reported cases are in the thoracic and lumbar spine. Occurrence of intramedullary epidermoid cysts in the cervical spine is extremely rare. An 18-year-old male with a giant intramedullary tumor extending from the brain stem to the upper thoracic spinal cord presented at our outpatient department. The patient underwent total excision of a silvery white lesion through a midline myelotomy. Histopathological examination was suggestive of an epidermoid cyst. We present a brief report of the case and discuss the relevant literature.

DISCUSSION
Epidermoid cysts are benign tumors originating from ectoderm remnants from the 3rd to 5th week of gestation. They result from incomplete cleavage of the neural ectoderm from cutaneous ectoderm. The resultant of epiblasts in the neural tube may slowly grow with accumulation of normally dividing cells (1,2). They may reach a large size gradually before onset of symptoms (4,5).

The incidence of intracranial epidermoid is estimated to be around 0.2%-1%. Spinal epidermoid cysts are much rarer. Intramedullary epidermoid tumors remain limited to
case reports. Reported incidence within the spinal cord is extremely low, accounting for less than 1% of intramedullary spinal cord tumors.

Most cases of intramedullary epidermoid occur distally with rostral lesions being rare. The thoracic cord is the most common site for intramedullary epidermoid followed by the lumbar spine. Only two cases of cervical intramedullary epidermoids have been reported in the literature (3). This may be the first case of an intramedullary epidermoid extending from the brain stem to the thoracic spinal cord.

Radiological findings of these lesions may help to differentiate them from other intramedullary lesions. On magnetic resonance imaging, epidermoids show heterogeneity on T1- and T2-weighted images. Disparity in tissue density may be due to the variable lipid and protein component in these lesions. No contrast enhancement may be seen. Subtle abnormalities in bony spine due to slow progressive growth of lesion and due to imperfect midline developmental closure should be looked for (3).

Total excision of intramedullary epidermoids should normally be attempted. However, the capsule of the tumor when densely attached may have to be left behind to prevent neurological damage. Total excision of the lesion was achieved in our case but the patient developed respiratory difficulty in the postoperative period.

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REFERENCES