Intramedullary neurofibroma

Neurofibromas are occasionally present in spinal roots; however, an intramedullary neurofibroma is especially rare. Although a few cases of intramedullary neurofibromas in cervical spinal cord have been reported, there are no reports of intramedullary neurofibromas in thoracic spinal cord, and moreover, no reports have clearly reported immunohistochemical findings. A rare case of a large intramedullary neurofibroma in the thoracic spinal cord from a 52-year-old man presented with a 2-year history of progressive gait disturbance. Neurological examinations demonstrated complete motor and sensory deficit of his legs. Magnetic resonance imaging of the thoracic spine demonstrated an intramedullary enhancing mass within the spinal cord between T4 and T5 levels. The patient underwent T3-T6 laminectomy surgery. The dura mater was opened to reveal fusiform dilatation of the spinal cord and a midline myelotomy was performed. An intramedullary mass was revealed and could be resected totally. Histopathological examination revealed that the tumor cells exhibited spindle-shaped and wavy nuclei with abundant collagen, which resembled schwannoma or fibrous meningioma. By immunohistochemical examination, some tumor cells were positive for S-100 proteins; however, most tumor cells were strongly positive for CD34 [1)].

1)
Arishima H, Kitai R, Kodera T, Yamada S, Kikuta KI. A Large Intramedullary Neurofibroma in the Thoracic Spinal Cord: Case Report. Neurol Med Chir (Tokyo). 2014 Jan 10. [Epub ahead of print] PubMed PMID: 24418789.