

Huge High Cervical Spine Lipoma

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Abstract

Cervical spine lipoma is rare condition in this article we report a 26 years old female presents with upper and lower limb numbness and weakness C2-C3-C4- laminectomy and debunking was done patients completely recovered from neurological symptoms after 4 months.

Keywords: Cervical; Spine; Lipoma

Introduction

One of the uncommon spine tumors, which account for fewer than 1% of all spine tumors, is non-dystrophic cervical lipoma. While lipoma with spinal dysraphism in the lower lumbar spine is not uncommon, it is common at the thoracic level [3]. The possibility of discovering such a lipoma has grown with the use of MRI [4]. The patient typically makes their first appearance in infancy or later when the mass growth quickens. Some people don't become aware that they have a spinal anomaly until they start experiencing symptoms including foot deformity, hip dislocation, or bladder and bowel problems [1].

Case

A 26-year-old female appears to the spine department complaining of numbness and weakness in her upper and lower limbs as well as an unsteady stride.

When examined, the upper and lower limbs had grade 3 power and intact feeling.

Operations

Under general anaesthesia and aseptic condition, the patient was on Wilson's frame with prone position and the head fixed using mayfield clamp.

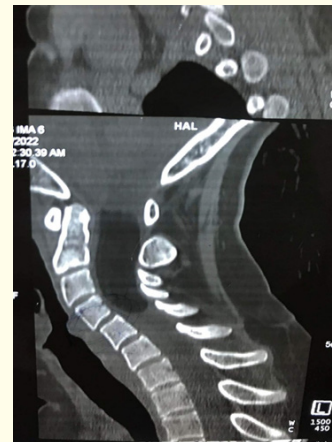


Figure 1: CT scan sagittal view



Figure 2: MRI.

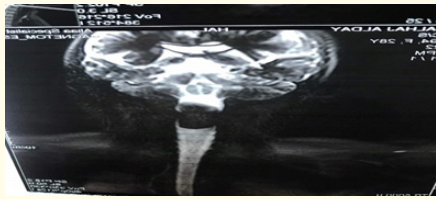


Figure 3: CT scan sagittal view.



Figure 4: MRI coronal view.

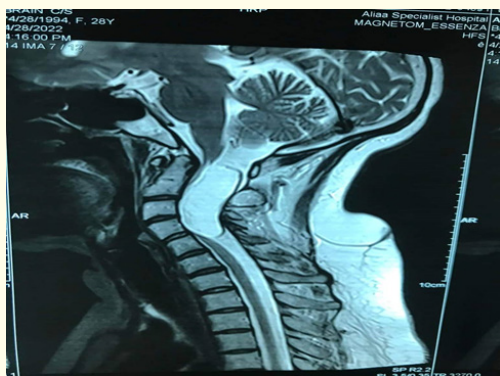


Figure 5: MRI cervical spine T2 showed hyper intense intradural extramedullary lesion.

The whole operation under fluoroscopy guidance and with microscope assistance. Routine preparation and drapes. Mid line posterior neck incision, opening of the investing fascia and muscles splitting

Posterior C2 to C4 laminectomies were done after that duratomy, which revealed an intradural extramedullary lipoma that was adherent to the spinal cord in the absence of a line of cleavage between tumors and neural elements. For this reason, debulking of the tumor was done, which was followed by watertight closure of the dura. C2-C2 fixation is done using lateral mass screw.



Figure 6: MRI cervical spine T1 showed C2-C5 intradural extramedullary lipoma which is hyperintense.

The patient recovered smoothly from anesthesia and without complications and neurologic deterioration.

In 3rd postoperative she had developed CSF leak which was treated conservatively and the leak stopped spontaneously after 3 days.

Discussion

Non-dystrophic lipoma is the subject of numerous theories. It was described as hamartoma by some authors.

Although real lipomas had been recorded, those normal adipocytes suggested a non-neoplastic nature due to their midline location and similar metabolic profile [1] and others identified it as adipocytes, which migrate inside the neural tube during development. After doing so, they become fully developed adipocytes. Another idea contends that metaplasia occurs in the mesenchymal cells that develop into the vasculature, culminating in the development of adipocytes inside the neural tube [6]. Cervical lipomas can have mild to significant clinical signs, depending on the size and location of the lesion. Typically, an MRI with a lesion hyperintense at T1 and T2 sequences and suppressed signal intensities used to make the neurology diagnosis.

- Rapaport, 1982 [6]
- White, 1983 [7]
- Wood, 1985 [8]
- Mori, 1986 [9]
- McGillicuddy, 1987 [10]
- Fan, 1989

- Ammornmarn, 1992 [11]
 - Donati, 1992 [12]
 - Crols, 1993 [13]
 - Naim-Ur-Rahman, 1994 [14]
 - Wilson, 1996 [15]
 - Chaskis, 1997 [16]
 - Kogler, 1998 [17]
 - Kai, 2003 [18]
 - Kim, 2003 [19]
 - Le Feuvre, 2004 [20]
 - Bhatoe, 2005 [21]
 - Naim-Ur-Rahman, 2006 [22]
 - Muthusubramanian, 2008 [4]
 - Chagla, 2008 [3]
 - Mengual, 2009 [23]
 - Sanli, 2010 [24]1
 - Ahmed, 2015 [5]
 - Meher, 2017 [26]
 - Severino, 2017 [27]
 - Mohammad Ali 2022 [3]
 - Present case 2023
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Conclusion

Non dystrophy cervical lipoma is rare condition. Decompression with subtotal resection is an effective surgery with favourable outcomes.

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