IJMPR 2024, 8(7), 133-135

International Journal of Modern Pharmaceutical Research
www.ijmpronline.com

ISSN: 2319-5878
IJMPR
Case Report

SJIF Impact Factor: 6.669

CASE REPORT ON NEUROFIBROMA CAUSING COMPRESSIVE CERVICAL MYELOPATHY

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Article Received on: 21/05/2024
Article Revised on: 11/06/2024
Article Accepted on: 02/07/2024

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ABSTRACT

Cervical myelopathy is a condition involving compression of the spinal cord at the cervical level of the spinal column either due to neoplastic or non-neoplastic causes. Among the neoplastic causes, the slow growing, benign tumours are intradural in origin, of which most are attributed to meningiomas or neurofibromas. Neurofibromas are benign tumors of the nerve sheath that typically arise from the posterior root. This is a case of neurofibroma causing compressive cervical myelopathy which presented as a 33 yr old female with complaints of neck pain radiating to left shoulder and associated with tingling of left hand since 5-6 months. Cental nervous system examination : Decreased hand grip on left side, weakness of small muscles of left hand with presence of supinator and brachio radialis inverse reflex. MRI C- spine with contrast: Well defined heterogenously enhancing altered signal intensity lesion in the spinal canal at C5-C6 level with left lateral extension: s/o intradural extramedullary lesion most likely neurofibroma.

INTRODUCTION

Cervical myelopathy is a condition involving compression of the spinal cord at the cervical level of the spinal column either due to neoplastic or non-neoplastic causes. Among the neoplastic causes, the slow growing, benign tumours are intradural in origin, of which most are attributed to meningiomas or neurofibromas.

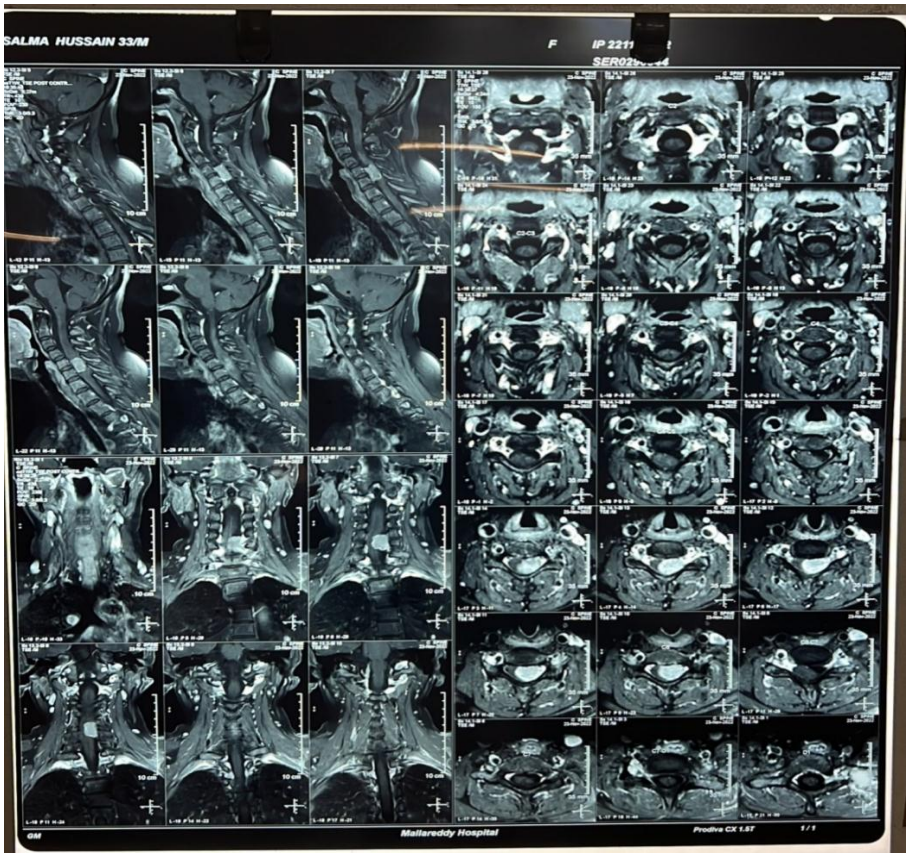
Neurofibromas are benign tumors of the nerve sheath that typically arise from the posterior root; when multiple, neurofibromatosis is the likely etiology. Neurofibromas causing compressive myelopathy may also be sporadic in origin. Symptoms usually begin with radicular sensory symptoms followed by an asymmetric, progressive spinal cord syndrome. Therapy is surgical resection**.**

CASE REPORT

A 33 yr old female patient presented to general medicine OPD with complaints of neck pain since 5- 6 months, insidious in onset, gradually progressive, aggravated on rotation of head, radiating to left shoulder and left arm. H/o tingling of left hand since 5-6 months, insidious in onset, initially involving left thumb and index finger, gradually progressive to involving other three fingers of left hand, relieving with medication. There was no H/o trauma to neck, weakness of other limbs, decrease or blurring of vision. On her neurologic examination, she had intact function of cranial nerves, normal bilateral visual fields. There was left pronator drift and wasting of thenar and hypothenar eminence of left hand. Her strength examination revealed decreased hand grip of left hand (80%) compared to right hand (100%), mildly decreaed left wrist flexion and weakness of left opponens pollicis, abductor pollicis brevis. There were no stigmata of neurofibromatosis.

Routine blood examination like CBP, RFT, ESR revealed normal studies. MRI cervical spine with contrast was done which revealed evidence of well defined altered signal intensity lesion measuring 1.6×0.8×1.3cms which is hypointense on T1 image, mixed intense on T2, hyperintense on STIR at C5-C6 spinal canal level which extended above to C5 vertebral body and below to C6 vertebral body with contrast enhancement showing encasement of nerve roots.

The well defined lesion extended laterally towards left lateral recess, neural foramina and pushing spinal canal towards right side (features suggestive of spinal cord compression).



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DEPARTMENT OF RADIODIAGNOSIS

NAME: SALMA HUSSAIN **AGE:** 33 YRS

IP/OP: 221123062 **DATE:** 25-Nov-22

MRI OF CERVICAL SPINE WITH CONTRAST

Scan parameters: MRI of Cervical spine has been performed using spin echo technique. Both T1W and T2W images were obtained in axial and sagittal planes. In addition, whole spine screening was carried out.

Observation:

E/o well defined altered signal intensity lesion measuring 1.6x0.8x1.3 cms (CC x AP x ML) which is hypointense on T1, mixed intense on T2, hyperintense on STIR noted in spinal canal at C5-C6 level. The lesion is seen extending laterally towards left lateral recess , neural foramina, medially is seen pushing the spinal canal towards right side – s/o cord compression.

The lesion is seen extending superiorly upto C5 vertebral body & inferiorly upto C6 vertebral body. On contrast study enhancement is seen. The lesion shows traversing nerve roots within – s/o encasement of nerve roots.

No E/o obvious neural foramina widening.

Partial Disc desiccation changes noted at C5-C6 level

Mild central disc bulge noted at C4-C5, C5-C6 levels causing indentation over anterior thecal sac. No significant nerve root compression seen.

Vertebrae reveal normal alignment and marrow signal intensity without any obvious focal lesion.

Atlanto-axial articulation and cervicomedullary junction appear normal.

Rest of the cervical discs appear normal.

Rest of the spinal cord appears normal and does not reveal any intrinsic focal signal abnormality.

No abnormal pre-vertebral and paraspinal mass lesion is seen.

Screening of D- spine: appears normal.

Screening of C- spine: appears normal.

IMPRESSION:

- ***Well defined heterogeneously enhancing altered signal intensity lesion in the spinal canal at C5-C6 level with features and extensions as described above – s/o intradural extramedullary lesion – spinal canal nerve sheath mass most likely neurofibroma .***
- ***Partial Disc desiccation changes at C5-C6 level***
- ***Mild central disc bulge at C4-C5, C5-C6 levels causing indentation over anterior thecal sac.***

RADIOLOGIST

After admission patient was treated with Inj. Hydrocort for 3days, Tablet Gabapentin +

Mecobalamin once daily, hand grip exercises. Patient was referred to a neurosurgeon for resection of neurofibroma. Patient underwent resection for neurofibroma, following which patient handgrip and weakness of left hand improved compared to prior on 1 month of follow up. The reports of resection were not available due to non compliance for further follow up.

DISCUSSION

Spinal neurofibromas are considered rare benign tumors of the spine. They comprise about 2-5% of all primary spinal neoplasms. They rarely cause symptoms. Neuro fibromas may occur as sporadic in origin or be part of Neurofibromatosis type 1 (isolated lesions to diffuse neurofibromatosis). Asymptomatic spinal neurofibromas can be treated with medical management with gabapentin and muscle strengthening exercises alone and are followed up regularly with MRI whole spine to look for increase in the size of neuro fibroma. Symptomatic neuro fibromas causing nerve compression and muscle weakness need to be treated surgically by resection of lesion.

Rarely neuro fibromas may have both intradural and extradural components. Neurofibroma with intramedullary extension are more difficult to manage and require micro surgical excision.[1]

CONCLUSION

Spinal cord compression due to spinal neurofibroma is rare. To our knowledge, there are few published reports of a neuro fibroma of cervical spinal level causing compression. These lesions could present with radicular and myelopathy symptoms which maybe progressive. MRI of the entire neuroaxis is beneficial to identify the etiology. Surgical resection of neurofibroma is generally required and might become technically challenging due to possible intradural and intramedullary involvement, and intimate adhesion to neural elements.

REFERENCES

1. Sadeh M, Farhat H. Severe High Cervical Cord Compression Due to Large Bilateral Neurofibromas in a Patient With Neurofibromatosis Type 1: A Case Report and Review of Literature. Cureus, Jul. 24, 2022; 14(7): e27211.

BOOKS

- Loscalzo, Fauci, Kasper, Hauser, Longo, Jameson. Harrison's Principles of Internal Medicine. 21st ed., McGraw-Hill.