



Case report on compressive cervical myopathy

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Received 19 Nov 2022; Accepted 4 Jan 2023; Published 13 Jan 2023

Abstract

Introduction: Cervical myelopathy is a condition describing a compression of the spinal cord at the cervical level of the spinal column resulting in spasticity, hyperreflexia, pathologic reflexes, digit/ hand clumsiness or gait disturbance. Classically it has an insidious onset progressing in a stepwise manner with functional decline. Without treatment, patients may progress toward significant paralysis and loss of function ^[1].

Clinical findings: Symptoms of cervical myelopathy include clumsiness in the hands, restricted ability to do fine motor skills, neck pain, weakness, pain in the shoulder or arms, and numbness in one or both hands.

Diagnostic evaluation: Blood test: Hb-13.5 gm%, Total RBC count-4.95 millions/cu.mm, Total WBC Count-14700 / cu mm, Total Platelet Count: 2.28, RDW- 14.6 %, Monocytes-04%, Granulocytes-64%, Lymphocytes-30%, Therapeutic Intervention: Tab MVBC OD, Tab Dolo 650 SOS, Tab Neurovit 1 Tab OD.

Outcomes: After treatment patient shows improvement.

Conclusion: Patient was hospitalized to AVBRH Neurosurgery Department with chief complain of tingling sensation in both lower limbs and also involved bilateral upper limbs associated with generalized weakness.

Keywords: tingling sensation, compression cervical myelopathy

Introduction

Cervical myelopathy is caused by compression of the cervical spinal cord. Any space-occupying lesion in the cervical spine that has the propensity to compress the spinal cord might produce cervical myelopathy ^[2]. Pressure on the anterior spinal cord induces ischemia as a result of chord distortion, resulting in cervical myelopathy. Long periods of stable impairment followed by episodes of worsening or a linear progressive trajectory describe the spontaneous course of myelopathy. How a cervical myelopathy presents is influenced by the severity of the spinal cord compression as well as its location ^[3].

Cervical myelopathy is a kind of neurologic disability induced by compression of the cervical spinal cord, which is most often caused by degenerative cervical spondylosis. Conditions including symmetric numbness and tingling in the extremities, hand clumsiness, and gait imbalance are more common in senior citizens. In cervical myelopathy, the lateral corticospinal circuits are often squeezed, resulting in loss of voluntary skeletal muscle control. It's what causes cervical myelopathy's wide-based spastic gait and uncomfortable upper-extremity function ^[4].

One of the most common types of cervical myelopathy is cervical spondylotic myelopathy. Cervical spondylopathy, a progressive degradation of the spine more common in persons over the age of 50, is one of the most likely causes of myelopathy. In 90 percent of cases or persons, cervical myelopathy is caused by a narrowing of the spinal canal and compression of the spinal cord. Both men and women are affected by cervical spondylosis. It often begins around the age of 50 in men and around the age of 60 in women. It results in a

high number of hospitalizations or a high rate of hospitalizations ^[5].

Patient identification

A male patient of age 65 years of old was brought to AVBRH with chief complain of gradual progressive symmetrical tingling parathesia started in both lower limbs from 1year and involved bilateral upper limbs from last 6months and have weakness.

Present medical history

A male patient of age 65 years was brought to AVBRH on 7th December 2021 by his relative with complain of having tingling sensation and generalized weakness. He was then admitted to Neuro surgery Department. After investigation he is diagnosed as compressive cervical myopathy.

Past medical history

My patient does not have any past medical history, he has no any history of diseases such as hypertension, asthma, tuberculosis, diabetes mellitus, or any allergy.

Family history

All other members of the family were not having complaint in their health except for my patient who was being admitted in the hospital.

Past intervention and outcomes

Patient has not taken any treatment for cervical myopathy, as for tingling sensation in limbs and weakness they went to

private clinics from where he was referred to AVBRH for further treatment.

Clinical findings

Tingling sensation over limbs, generalized weakness, hand clumsiness, limited ability to perform fine motor tasks, neck pain, weakness, pain in shoulder or arms, numbness in one or both hands.

Etiology

Aside from wear and strain on the spine, cervical myelopathy can be caused by the hardening of the ligaments that surround the spinal cord, which means the soft tissue that joins the bones and spinal column becomes less flexible. Rheumatoid arthritis of the neck, spinal infections, spinal tumours, and malignancies are some of the other causes.

Physical examination

There is not much abnormality found in head to toe, the patient experienced weakness and tingling sensation over limbs. Cardiovascular system: s1 s2 heard, blood pressure: 110/70 mmhg, Respiratory system: bilateral clear.

Diagnostic assessment

Blood Test: Hb- 13.5 gm%, Total RBC Count- 4.95 millions/cu.mm, Total WBC Count- 14700/cu mm, Total Platelet Count: 2.28, RDW- 14.6%, Monocytes- 04%, Granulocytes- 64%, Lymphocytes- 30%.

MRI report

There is straightening of cervical spine curvature. There is mild bilateral paracentral disc bulge noted at C4-C5 level causing narrowing of bilateral neural recess with compression of traversing and exiting nerve roots. There is ossification of posterior longitudinal ligament seen from level of C3-4 intervertebral disc level to the level of C5-C6 intervertebral disc space causing compression over the cord with canal stenosis.

Therapeutic intervention

Tab MVBC OD, Tab Dolo 650 SOS, Tab Neurovit 1 Tab OD.

Nursing management

Vital signs are time to time recorded. Patient condition is not stable. He shows no reaction or response to treatment. The nurse should assist the patient with compressive cervical myelopathy diligently. Even if there is technological advancement a thorough neurological assessment of the patient is most important. Patient oxygen level is monitored. It is important to assess the neurology status every 1 to 2 hrs or whenever it is necessary till the steady condition of the patient. Monitor growth and stability indicators like irregular breathing, stress or any changes in patient condition. Excellent nursing care was provided as reported by patient family members. With full recovery, nurses assist the patient in regaining his or her prior level of independence and happiness.

Discussion

On 7th December 2021, 65 year old male patient from Nanded was brought to the AVBRH neurosurgery unit with the symptoms like tingling over the limbs, gradual progressive

symmetrical tingling parathesia started in both lower limbs from 1 year and involved bilateral upper limbs from last 6 months and also having generalized weakness. After all investigation it was determined that the patient has compressive cervical myelopathy. Following therapy, it is critical to detect the condition at an early stage so that the patient does not develop complication. It is important to take preventive measures. My patient shows great improvement after getting a treatment and the treatment was still going many patients and physicians believe that neck pain is a "natural" aspect of ageing, but recognizing myelopathy and distinguishing it from other causes of neck pain, such as arthritis, requires vigilance on the part of practitioners. The term "spondylotic" is included in "cervical spondylotic" myelopathy because myelopathy, or spinal cord dysfunction, is frequently linked with and caused by the normal osteoarthritic alterations of the axial spine that occur with normal ageing. This myelopathy can be classified into five different syndromes depending on where the sickness is located in the cervical spine (lateral, medial, combined, vascular and anterior). Clinical symptoms or indicators, as well as radiological evidence of spinal cord compression, are present in all five variations [6].

Cervical spondylitis with stenosis and spinal cord compression can present itself in a number of ways. Patients with severe spinal cord compression on an MRI may have no or few symptoms, whereas others with considerably less disease may develop severe symptoms. Paresthesias are prevalent in both upper extremities. Clinically evident weakness is frequently followed by subtle alterations in gait and balance. Patients will notice fine motor control issues as the illness worsens [7].

Cervical myelopathy can develop slowly in people with cervical spondylosis, whether or not they have radiculopathy. Initial symptoms may include a loss of range of motion and stiffness in the neck. Radiculopathy's dermatomal pattern may give way to nonspecific, global pain and paresthesia in the upper extremities, as well as a shift in pain intensity and character. Patient may develop stabbing pain in the arm, elbow, wrist, or fingers, as well as dull-achy heaviness in the arm and tingling and numbness in the hands. Radiculopathy and myelopathy may coexist in certain patients, resulting in a varied pattern on examination. Changes in bowel or bladder function may accompany a loss of fine motor control [8].

Recognize the existence of CSM and manage or refer as needed depending on the level of engagement. The fact that CSM may be a component of the natural history of a degenerating disc herniation adds to the difficulty. The existence of lower limb symptoms and higher motor neuron signals, as well as the stability of symptoms, or more particularly the lack of advancement of neurological signs, are all important factors in differentiating cervical radiculopathy from myelopathy. The therapy of a disc herniation should be approached with caution, as some may proceed spontaneously, making manipulative treatment a complete contraindication [9].

Conclusion

On 7th December 2021, 65 year old male patient from Nanded was brought to the AVBRH neurosurgery unit with the symptoms like tingling over the limbs, gradual progressive symmetrical tingling parathesia started in both lower limbs from 1 year and involved bilateral upper limbs from last 6 months and also having generalized weakness. After all

investigation it was determined that the patient has compressive cervical myelopathy. Following therapy, it is critical to detect the condition at an early stage so that the patient does not develop complication. it important to take preventive measures. My patient shows great improvement after getting a treatment and the treatment was still going.

Consent

Information was provided to the patient and his relatives and informed consent was obtained from patient

Ethical approval

It is not applicable.

Competing interests

Authors have declared that no competing interests exists.

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