An intramedullary tumor presenting with hyperhidrosis

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A case of a cervical intramedullary tumor is reported whose presentation was with disabling hyperhidrosis. The symptom resolved after surgical debulking of the tumor. Hyperhidrosis as a presenting manifestation of an intramedullary tumor has not been reported earlier.

Key Words: intramedullary tumor, hyperhidrosis, cervical cord tumor

Introduction

We report an unusual case of hyperhidrosis in a middle-aged woman, as a presenting feature of an intramedullary cervical tumor: We could not locate any similar case in the literature.

Case Report

A 56-year-old lady presented with difficulty in using her hands as the initial complaint for a period of 6 months. This was followed by excessive sweating involving her head and neck area, so much so that she had to use 10-12 handkerchiefs daily to wipe herself. By the time she was seen at the Clinic, she had also started experiencing difficulty in walking “with a tendency to fall forwards” and had also developed urgency of micturition. However her main disabling symptom was hyperhidrosis.

References


3. Castillo M, Davis PC, Takie YD, et al. Intracranial MFH secondary to an extracranial primary lesion have been described.8 Here, a cystic lesion with a ring-shaped tumor rim of decreasing signal intensity in T2-weighted image was seen. MRI is superior to CT in demonstrating tumor extent and edema.

The treatment for MFH has been described as a combination of radical excision, radiotherapy and chemotherapy. However, MFH of the brain has always been a gloomy prospect with a relentless course leading to death within the 1st year after surgery.3 Radical removal in case No.1 would have been extremely formidable due to the involvement of more than one venous sinuses converging onto torcular Herophili. The hazards associated with interruption or diversion of venous sinus flow and reconstruction of the torcular Herophili in an attempt to achieve complete resection of a peritumoral malignant tumor seem unwarranted.19

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On examination, she had a mild spastic quadriparesis. She was also observed to have wasting and weakness of the small muscles of her hands. There was excessive sweating in her face and head and neck area, without significantly increased sweating in her trunk or limbs. MR scan of her cervical spine showed a large intramedullary space-occupying lesion extending from the level of the foramen magnum down to the D2 level. A syrinx was identified both above and below the level of the lesion. She declined surgery initially only to return after 2 months with advanced neurological deficits. At this time she had marked spastic quadriparesis, disabling hyperhidrosis, urge incontinence, decreased sensation to pinprick below her sternal angle, and diminished posterior column sensations in her lower limbs. She could barely stand unaided, was dyspneic and had abdominal respiration without much excursion of her chest wall. The tumor was debulked after performing a C2 to D2 laminectomy.

Postoperatively the patient had dramatic and complete cessation of her hyperhidrosis. Her spastic quadriparesis gradually improved, and at the time of discharge she was able to walk unaided and was able to pass urine normally. She had no respiratory problem. A follow-up MR scan was done after 6 months and the T1 weighted Gadolinium enhanced image (Figure 1) showed a small residual tumor. The histopathological examination confirmed that the tumor was an astrocytoma.

**Discussion**

Intramedullary spinal cord tumors can present with a variety of symptoms. Neck or back pain is often the earliest symptom. Sensory symptoms frequently antedate the motor symptoms and are consistent with the central location of the lesion within the spinal cord. Involvement of the descending autonomic pathways, which are located between the corticospinal and spinthalamic tracts may cause both sympathetic and parasympathetic disturbances below the level of the lesion.

Hyperhidrosis has been described in spinal cord injured patients, and also in post-traumatic syringomyelia. A syndrome of autonomic dysreflexia has been described which occurs in patients with lesions of the spinal cord above the D6 spinal level. This is characterized by exaggerated autonomic responses to stimuli which may be innocuous in normal individuals. In our patient it is likely that there was involvement of the sympathetic fibers in the upper cervical cord or in the ciliospinal center of Budge at the C8-D2 segmental level.

Hyperhidrosis in this instance may be postulated to have occurred as a result of overactivity of the sympathetic fibers due to irritation by the tumor. It may be hypothesized that had no treatment been done, the hyperhidrosis may have gradually progressed to anhydrosis.

**References**


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