

Hysterical Paraplegia

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Abstract

Hysterical paralysis is an uncommon, psychogenic, nonorganic loss of motor function precipitated by some type of traumatic event. Typically, it is a diagnosis of exclusion after all the organic causes have been ruled out. The purpose of this case report is to highlight the phenomenon of hysterical paralysis.

Key words: Cesarean section, psychiatric disorders, spinal anesthesia

INTRODUCTION

Nonorganic paraplegia is a challenge for the clinician as for as the diagnosis and treatment are concerned. Cases considered on psychiatric grounds to be of hysterical paraplegia have subsequently turned out to have some organic disease.^[1] In hysterical conditions, distribution of weakness is irrelevant and irregular with respect to anatomical distribution of nerves. Thus, the outcome in the form of complete recovery must be used as one of the criteria for establishing the diagnosis as being nonorganic.^[2] There have been only a few reported cases of paralysis of nonorganic cause after spinal and epidural anesthesia.^[3] Different case reports have shown similar characteristic features in patients which are abrupt onset, female gender, young age, low socioeconomic status, neurological disorders, and presence of evident psychological features.^[4] In this report, we describe the case of a patient with hysterical paralysis who presented after attempted spinal anesthesia with above-mentioned characteristic features.

CASE REPORT

We received a 23-year-old female, an educated homemaker, with no past history of neurological disorders but had low-grade deafness at our institute. The patient was fully conscious and oriented to time, place, and person at the time of presentation. From the history of attendants and as per records attached, patient was admitted for caesarean section selectively to civil hospital. Before the surgery, the patient was informed about

known complications of regional anesthesia. The preoperative assessment was unremarkable. The anesthesiologist attempted spinal anesthesia with 23 gauge spinal needle in L_{2,3} space, and it turned out to be an unsuccessful spinal. At the same time, patient became restless and had nodding movements of head due to which needle was withdrawn and patient was made to lie supine and it was decided to postpone the case. After that, patient started complaining of weakness of both lower limbs and had no sensations. Both motor weakness and sensory loss were patchy in distribution. Patient had stable vitals and was referred to our institution. On the way, patient was unable to lift the limbs but had toes movements present. However, patient improved during the transfer and had no paralysis when received by us. On receiving the patient, she was sent for neurological examination and magnetic resonance imaging (MRI) imaging. In the neurological examination, she had normal plantar responses and deep tendon reflexes were normal. Bilateral knee jerks and Achilles tendon reflexes were normal. Patient had normal gait. No muscle weakness was present. She was able to walk without any assistance. There was no disturbance of bladder function and she continued to pass urine normally. Bladder and rectal tone were normal as patient did not pass stools and urine involuntarily.

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Cerebrospinal fluid (CSF) examination was normal; evoked responses were not done as the facility was not available at our institution. Plain film of the spine was normal. After that, psychiatry call was sent as patient had history of some neurological deficit and low-grade deafness to rule out some nonorganic cause. As patient was in labor with a history of previous lower segment cesarean section, the case was taken up under general anesthesia. MRI imaging was done but failed to show any evidence of spinal cord pathology, conus, cauda equina injury, edema, or bleeding. She was operated under spinal anesthesia previously. Postoperatively, she had some urinary retention problems due to which she had remained catheterized for 2 weeks.

The mental state examination revealed a friendly person with appropriate general appearance, behaviour, and no cognitive or perceptual disorders. Structured clinical interviews such as structured clinical interview for Diagnostic and Statistical Manual of Mental Disorders I and II, Beck depression inventory, Hamilton depression rating scale, brief psychiatric rating scale, borderline symptom list, difficulties in emotion regulation scale, and dissociative experiences scale^[5,6] were used to assess her current symptomatology.

DISCUSSION

Acute paraplegia after spinal anesthesia is an emergency and may occur due to chemical, physical, or ischemic injury to spinal cord. Various diagnostic interventions are necessary to exclude hematoma, abscess, inflammation, transient ischemic attack (TIA), or any other organic cause of the spinal cord. In some patients, minor bleeding or an evolving lesion may not manifest clinically for further 2–3 days. Due to this reason, we did MRI which showed no abnormality. Patients with organic disease usually have abnormal reflexes and loss of bladder and rectal tone, so these parameters should be elicited. In the present case report, these parameters were within normal limits after 4–5 h. It is also important that anomalies of neurological reflexes and loss of rectal tone may also occur in diseases of organic cause. Further, some type of nerve traction or injury during spinal may lead to these results. However, this type of short duration of weakness in this case was less likely due to any organic cause. Moreover, since no CSF or blood was aspirated, an injury of vascular supply, intravascular instillation, and intrathecal leakage through the dural puncture, or a spinal cord TIA was ruled out. For diagnosis, recovery

of the motor deficit is the rule. It is usually complete but can sometimes be only partial and may occur suddenly or gradually.^[7] To exclude organic paralysis, neuroimaging and electrophysiological examination are obligatory.^[4] Features enabling the diagnosis of hysterical paraplegia in our case were presence of paraplegia, history of psychiatric illness, disproportionate motor paralysis, sensory loss not conforming to a particular anatomical distribution, normal tone and normal reflexes, down going plantars, rapid and complete recovery without any intervention and any residual paralysis. Patient had normal rectal sensations with intact rectal and bowel function. Motor evoked potential and somatosensory evoked potentials are very effective and sensitive for making the correct diagnosis, but they are very costly and were not available in our setup. To treat these conditions, multimodal approach should be instituted, i.e., psychotherapy, relaxation techniques, autogenic training, and intensive physical therapy. Psychiatric consultation is also important to further define underlying psychopathology and render support during the recovery period. Patients should be assured with positive attitude about reversibility and good prognosis of the disorder.^[8]

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Conflicts of interest

There are no conflicts of interest.

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