

Paraparesis in Pregnancy: A rare Presentation

Patil G L¹, Khan A N¹, A S Shridevi¹, Krishnamurthy L², Prashanth S², Vijay C³
B S Prasad⁴, Kishan B⁵, Megha⁶

¹ Dept of OBG, ² Dept of Neurology, ³ Dept of Anaesthesiology, ⁴ Dept of Pediatrics, ⁵ Dept of Radiology, ⁶ House Surgeon
S S Institute of Medical Sciences & Research Centre, Davangere, India.

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Abstract :

We report pregnancy in a paraparatic elderly primigravida who presented with 9 months of amenorrhoea weakness of both lower limbs and parasthesia of all extremities. both lower limbs showed decreased power, proximal muscles were more severely affected. nerve conduction revealed sensory neuropathy. MRI brain and spinal cord were unremarkable. patient was treated with Vitamin B12 and folic acid. Baby was delivered by emergency caesarean section. active photo therapy started from 5th post operative day and patient improved gradually.

Keyword : Paraparesis, Peripheral neuropathy, Pregnancy.

Introduction:

Paraparesis is a condition associated by a weakness of voluntary movement or partial loss of voluntary movement or by impaired movement involving both lower limbs. The term paresis is an ancient word meaning “to let go”. It is usually the sequel of bilateral damage to the corticospinal tracts, could be spinal lesions leading to spinal cord compression or cerebral lesions like venous sinus thrombosis or peripheral nerve diseases, muscle diseases or hysteria. Peripheral neuropathy in pregnancy is very uncommon, minor affections too can be bothersome in pregnancy. Impaired peripheral nerve function may threaten the mother and fetus in various ways during pregnancy. Early recognition and a multidisciplinary management are recommended.

Case report

We present an interesting case of a pregnant lady with paraparesis. A 34 years old lady elderly primigravida presented with 9 months of amenorrhea and weakness of both lower limbs preceded by numbness and paraesthesia of extremities of both upper and lower limbs for the past 1 1/2 months. Symptoms worsened 8 days prior to admission. There were no symptoms suggestive of cranial nerve involvement, bowel or bladder incontinence, back/ radicular pain or sensory loss. There was no h/o any drug intake/ infertility treatment. No significant past and family history of similar complaints.

Her previous menstrual cycles were regular with period of gestation being 38 weeks. She has been married for the past 12 years, though she had infertility work up done earlier this was a spontaneous conception. No significant past and family history of similar complaints.

On examination, she was poorly built and nourished with pallor and angular stomatitis (Figure 1) was present, vitals were stable, cardiovascular and respiratory system was within normal limits. On per-abdomen examination, uterus was term size, relaxed, cephalic presentation, longitudinal lie, unengaged head and fetal heart sounds heard well.



Figure 1:
Angular stomatitis of the patient.

Address Correspondence to :

Dr. Gayatri Patil

Professor, Dept. of OBG, SSIMS&RC,
Davangere

Mob. : 9886733535

E-mail : ptlgayatri@yahoo.co.in



A multidisciplinary team approach was planned involving a neurologist, anesthesiologist, sonologist, neonatologist and an obstetrician. Central nervous system examination revealed normal higher functions, bilateral eye movements were normal with reactive pupils, all cranial nerves were normal. Motor system examination revealed decreased power of both lower limbs where proximal muscles were more severely involved with normal tone and deep tendon reflexes, plantars being flexor in response. Power at the hip joints was 3+, knee 4+ to 5 and ankle joints 3+ to 4. Mild incoordination of bilateral fingers was present. No signs of meningeal irritation were seen. Apart from the routine investigations, coagulation profile was normal, serum Vit B12 and folic acid levels were in the normal range, serum levels of CPK and Magnesium were slightly reduced.

MRI spine and brain (Figure 2) showed normal scan except for minimal disc degeneration more at L 4-5, L5-S1 and post central disc bulges at some levels indenting thecal sac. Nerve conduction studies revealed sensory (axonal) neuropathy (lower limbs > upper limbs). Obstetric scan showed a single live fetus of 36 weeks duration, approximate weight being 2.4 kg, liquor adequate, placenta fundal with no doppler changes.

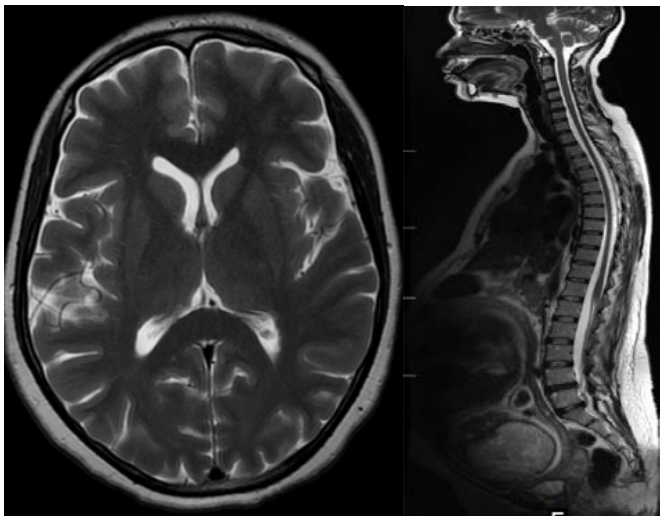


Figure 2: Brain MRI: Axial T2 image of brain revealed no abnormal signal.

Whole spine MRI: Sag T2 image of spine ruled out lesions at spinal cord and vertebrae. No signs of compressive myelopathy.

With a tentative diagnosis of peripheral neuropathy, she was started on Vit B12 injections and folic acid supplements. On 11.03.2014 she went into spontaneous labour and so she was taken up for an emergency caesarean section under general anesthesia, a live male baby delivered, no intraoperative or postoperative complications. She was put on heparin in the immediate postoperative period due to immobilization.

Active physiotherapy was started by the fifth postoperative period. There was gradual improvement by 2 weeks postpartum. She started to take small steps to the toilet all by herself. She is presently back to near normal state. She has been discharged from the hospital and on followup; both mother and baby doing well.

Discussion:

Peripheral neuropathy either due to compression or nutritional deficiencies are reported to be the most common causes of neuropathies seen during pregnancy. In the present case the probable diagnosis was thought to be compression neuropathy which resolved gradually following delivery, though she also received nutritional supplements. There are very few such cases reported in the literature and managing such cases at our set up with limited resources was quite challenging. All neuropathies seen during pregnancy should be followed up as some may persist.

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