

A Rare Case of Acute Motor Axonal Neuropathy- A Subtype of Guillain Barre Syndrome in Pregnancy

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1. Introduction

Guillain-Barré syndrome (GBS) is rare in pregnancy with an estimated incidence between 1.2 and 1.9 cases per 100,000 people annually. Guillain-Barré syndrome (GBS) represents a heterogeneous group of immune mediated peripheral neuropathies. A feature common to all GBS variants is a rapidly evolving polyradiculoneuropathy preceded by a triggering event, most often an infection. GBS generally manifests as a symmetric motor paralysis with or without sensory and autonomic disturbances. GBS should be considered in any pregnant patient complaining of muscle weakness, general malaise, tingling of fingers and respiratory difficulty¹.

2. Case Report

20 year old Primigravida with 22 weeks Gestational age came with chief complaints of bilateral lower limb weakness since 10 days, gradual in onset increasing in severity. History of frequent falls, with difficulty in sitting and standing from supine position was not able to maintain erect posture. Detail clinical history was taken. There is no history of upper limb weakness, bowel and bladder disturbances. There is no history of fever, cold, cough, loose stools, difficulty in breathing, palpitations, chest pain, syncope. Her present pregnancy: conceived spontaneously 3 months after marriage, diagnosed pregnancy at 2 months amenorrhea. First trimester was uneventful. At the time of admission.

Clinical examination

Clinical examination shows Vitals are stable. Temperature was normal, pulse rate was 106/min, BP was 100/60mmhg, Spo2- 98% with room air. ECG showed Sinus tachycardia. Neurological examination Revealed power of 2/5 in lower limbs and 4/5 in upper limbs, hypotonia, bilateral flexor plantar response and mild sensory involvement noticed. Higher mental functions, speech were normal and no cranial nerve involvement. A provisional diagnosis of GBS was made. Neurologist opinion taken and advised ENMG (Electromyography).

Investigations

Complete hemogram, S. Vitamin B12 levels, S. Electrolytes, Nerve conduction studies, ABG analysis has done, which are normal. ENMG revealed ACUTE MOTOR AXONAL NEUROPATHY involving bilateral common peroneal nerves.

Management:

Patient received treatment in the form of physiotherapy and inj. Vitamin B1 and multivitamin injections for 14 days with close observation of signs and symptoms, to which she gradually responded with respect to power and sense of well-being over next 72 hours, without need for IVIG or immunomodulatory drugs. Patient was discharged at request after 2 weeks of treatment and hospital stay with power of 5/5 in upper limbs and 4/5 in lower limbs. Close follow up was done till delivery. Patient had normal vaginal delivery at term gestation and a live female 3.1 kg baby was born. Delivery and postpartum was uneventful.

3. Discussion

GBS is thought to be immune mediated. But its pathogenesis remains unclear. About two thirds of patients have an infection within the previous 4-6 weeks, most commonly flu like illness or gastroenteritis. Implicated infectious agents include Mycoplasma pneumoniae, Campylobacter jejuni, Cytomegalovirus, and Epstein Barr virus². The preceding infection may cause an autoimmune response against the various components of peripheral nerve myelin, sometimes the axon. GBS classically presents with pain, numbness, paresthesia, or weakness of the limbs and this can be mistaken for psychological complaint, leading to delay in diagnosis and treatment³.

GBS can occur in any trimester of pregnancy and a maternal mortality of 7% has been reported. The management of GBS in pregnancy is similar to that of non pregnant women and includes intravenous immunoglobulins (IVIG), plasmapheresis and ventilatory support wherever required⁴.

4. Conclusion

A high index of suspicion for early diagnosis and prompt intensive multidisciplinary supportive care in a GBS complicated pregnancy improve the prognosis.

References

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