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Guillain Barre Syndrome in Pregnancy: A Rare Case!!

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ABSTRACT

This is a rare case of Guillain-Barré syndrome in pregnancy. Its incidence is between 1.2 to 1.9 /100000 persons annually. Its an autoimmune neurological disorder which represents immune mediated peripheral neuropathies. A common feature to all GBS variants is a rapidly evolving polyradiculoneuropathy. GBS generally manifests as a symmetrical motor paralysis with or without sensory and autonomic disturbances. It should be considered in any pregnant women complaining of muscle weakness, tingling of the fingers, and respiratory difficulty. This case is reported due to its rarity and high suspicion needed for its diagnosis. The management of GBS during pregnancy highlights the combined role of gynaecologist and physician, which if missed can be detrimental, for both mother and fetus.

Keywords: Guillian barre syndrome, Autoimmune neurological disorder, Acute motor and sensory axonal neuropathy, plasmapheresis

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INTRODUCTION

Guillain-Barré syndrome has improved greatly over the last decade with a clear idea of the clinical subtypes and the pathogenesis of some of its variants. 2016 will mark the centenary year of the original description by Guillain Barré and Strohl [1]. Its subtypes are acute inflammatory demyelinating polyradiculoneuropathy (AIDP) being the most common followed by acute motor axonal neuropathy (AMAN) and acute motor and sensory axonal neuropathy (AMSAN) which is rare. It became clear, that the syndrome varied in severity and its severest form could lead to respiratory paralysis and death [2]. In the Western world the most frequent subtype is AIDP where there is a primarily demyelinating pathology and various degrees of secondary axonal damage. AMAN [3] is the next most frequent and appears to be a primary axonal disorder affecting just motor nerves. Axonal variants involving both sensory and motor nerves are much rarer Acute Motor and Sensory Axonal Neuropathy (AMSAN)

CASE REPORT

A 20 year old female, primi with gestational age 28 weeks came with complaints of history of progressive weakness of lower limbs and difficulty in walking, which worsened to loss of ability to walk, the weakness progressed gradually to upper limbs.

The patient was apparently normal 5 days back, then she noticed weakness in both lower limbs after she woke up in the morning. The weakness worsened the following day and she was unable to walk. By the end of 3rd day, weakness was also noted in upper limbs and had difficulty in lifting her arms.

On examination, the patient was conscious, oriented, afebrile, acyanosed, anicteric, mild pallor and hydration status was satisfactory. Respiratory and Cardiovascular examination showed no abnormality. On abdominal examination, she corresponded to 28 weeks of gestation. On neurological examination, Patient was hypotonia, power of 4/5 in upper limbs, 3/5 in lower limbs with areflexia (lower limbs). There was no sensory impairment on bladder and bowel involvement. ECG showed sinus tachycardia. Nerve conduction study was done and it revealed motor and sensory neuropathy. She was given IVIG for 6 days and underwent physiotherapy. Her status improved with the help of physiotherapy and she started walking with support.

At 39 weeks she came with complaints of decreased perception of foetal movements and Cardiotocogram revealed foetal distress, she was taken up for emergency Lower segment caesarean section under TIVA (Total intravenous anaesthesia). She delivered an alive, term 2.7kg boy baby with good APGAR. Her post natal period was uneventful. The patient was discharged after 10 days of hospital stay with power of 5/5 in upper limbs, 4/5 in lower limbs, with persisting areflexia in lower limbs. Follow-up of the patient after 4 months showed no residual weakness.

DISCUSSION

GBS is thought to be immune mediated. About two thirds of patients have an infection within the previous 3-6 weeks, most commonly flu-like illness or gastroenteritis. Infectious agents include Mycoplasma, Campylobacter jejuni, Cytomegalovirus, pneumoniae and Epstein Bar virus.[4] GBS classically presents with numbness, pain, paresthesia, or weakness of the limbs and the signs and symptoms can be mistaken for a psychological complaint, leading to delay in the diagnosis and treatment.

GBS can occur at any trimester of pregnancy and post-partum period. Its known to worsen in post partum period due to an increase in the delayed type of hypersensitivity. da Silva, *et al.* reported a case of GBS, diagnosed at 15 weeks of pregnancy and aggravated postpartum. [5] Up to 20% of patients are disabled after 1 year and a maternal mortality of 7% has been quoted (non-pregnant GBS has mortality <5%).[6]

The management of GBS in pregnancy is similar to other non-pregnant population and includes intravenous immunoglobulins (IVIG), plasmapheresis and ventilator support when patient going in for respiratory paralysis. Immunomodulation with plasmapheresis and IVIG has found to improve the management outcomes with full recovery in 70-80% of patients. [5]



CONCLUSION

Hence, a high suspicion for early diagnosis and prompt multidisciplinary supportive care in a GBS-complicated pregnancy improves the prognosis of both, the mother and foetus.

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