ISSN: 0975-833X

Available online at http://www.journalcra.com

International Journal of Current Research
Vol. 11, Issue, 12, pp.8934-8935, December, 2019

DOI: https://doi.org/10.24941/ijcr.37454.12.2019

INTERNATIONAL JOURNAL OF CURRENT RESEARCH

RESEARCH ARTICLE

GUILLAIN-BARRE SYNDROME AFTER ABORTION IN FIRST TRIMESTER: AN UNUSUAL CASE REPORT

Amita Bhargava, Subhakaran khichar, Pankaj Awasthi, *Arvind Kumar Lakesar

Department of Neurology, Dr S.N. Medical College, Jodhpur, Rajasthan - 342003, India

ARTICLE INFO

Article History:
Received 24th September, 2019
Received in revised form
28th October, 2019
Accepted 15th November, 2019
Published online 31st December, 2019

Key Words:
Mutilation, CD ROM, ICT, Reprographic, Information Technology, Versatile.

ABSTRACT

Guillain-Barre syndrome (GBS) is an acute polyradiculoneuropathy which is frequently severe in course and assumed autoimmune disease pathogenically. Infection is most common assumed trigger, either respiratory or gastrointestinal. Although rare, there are case reports published worldwide that pregnancy and postpartum period are high risk condition for GBS. It is associated and reported in all trimester. GBS worsen in postpartum periods and had a bad prognosis. Recurrence also been reported in subsequent pregnancies. Here we report a case of GBS in first trimester, post dilatation and curettage procedure done after spontaneous abortion. Early diagnosis with high index of suspicion with early and aggressive management can reduce morbidity and mortality in this group of patients.

Citation: Amita Bhargava, Subhakaran khichar, Pankaj Awasthi, Arvind Kumar Lakesar. **2019.** "Guillain-Barre Syndrome After Abortion In First Trimester: An Unusual Case Report", *International Journal of Current Research*, 11, (12), 8934-8935.

INTRODUCTION

Guillain-Barre syndrome (GBS) is a heterogeneous group of acquired immune mediated peripheral neuropathies presenting as a rapidly evolving polyradiculoneuropathy commonly present as an areflexicsymmetric ascending quadriparesis with or without autonomic or sensory features preceded by an antecedent event, most commonly an infection.GBS should be suspected in any pregnant female who complaint of malaise, muscle weakness, paresthesias (tingling of the hands and feet), facial weakness unilateral or bilateral, respiratory or bulbar insufficiency. Delay in diagnosis in pregnancy and postpartum period can occur because of initial symptoms mimicking nonspecific complaints and physiological changes of pregnancy.

CASE REPORT

A 24-year-old primigravida presented with complaint of acute onset, rapidly progressive weakness in all four limbs, bilateral symmetrical, lower limbs more involved than upper limbs, proximal >distal ,associated with pain and distal paresthesia in form of tingling ,total of 5 days duration. She had history of spontaneous abortion of 8th month pregnancy 10 days back. Her symptoms were progressive for last 5 days in the form of progressively increasing difficulty in sitting and standing from supine position, difficulty in wearing slippers, difficulty in holding objects in hands, doing overhead activities with both upper limbs and mild difficulty in swallowing for liquids. At time of admission she was walking with two person support. A detailed history was taken which revealed initiation of symptoms during 8th week of pregnancy after abortion and there was no significant past history of any preceding illness present. Subsequent clinical examination revealed sinus rhythm, normotensive, power of 4/5 in upper limbs, 3/5 in lower limbs, hypotonia, areflexia in all four limbs, bilateral plantar flexor. Investigations including routine CBC,PBF and biochemistry, nerve conduction studies, arterial blood gases, electrolytes, urine porphyrin screening and later on cerebrospinal fluid analysis were performed. Arterial blood gas analysis was normal. Her CBC, PBF, Serum electrolytes and routine blood chemistry was normal. Electrophysiological studies revealed reduced amplitude of compound action potentials in median, ulnar, tibial and common peroneal motor nerve studies with decreased conduction velocities and absent F waves. Cerebrospinal fluid chemistry revealed raised protein of 110mg/dl and normal cell count, confirming the diagnosis of GBS. The patient received IVIg therapy and close observation was done for symptoms and signs progression. Patient started improving on scale of power and started walking with one person support over next 7 days . The patient was discharged after one week of hospital stay with power of 4/5 in all limbs.

Corresponding author: **Arvind Kumar Lakesar,**
Department of Neurology, Dr S.N. Medical College, Jodhpur, Rajasthan - 342003, India.

DISCUSSION

GBS is an acquired immune mediatedpolyradiculoneuropathy with incompletely understood pathogenic mechanisms. About two thirds of patients have a preceding viral infection within the previous 4-6 weeks, most commonly respiratory symptoms or gastroenteritis. Infectious agents include Mycoplasma pneumoniae, Campylobacter jejuni, Cytomegalovirus, and Epstein Bar virus (Hughes, 2005). Other viruses like HIV, hepatitis E and Zika virusesalso have reported association. Infection triggers an autoimmune reaction against the peripheral nerve myelin and sometimes the axon probably due to molecular mimicry. GBS can present as pain, numbness, paresthesia, rubbery feeling in legs, weakness of the limbs, respiratory and bulbar insufficiency, facial weakness and sometimes in early stages can be mistaken for a psychologicalpolysomatic complaints, that leads to delay in diagnosis and treatment (Vijayaraghavan, 2006). Association with pregnancy and postpartum period has been reported worldwide. GBS can occur in any trimester of pregnancy and post-partum period but it occurs more commonly in third trimester and first 2 weeks post-partum. GBS is known to worsen in post-partum period due to an increase in delayed type of hypersensitivity reaction. Da Silva, *et al*. reported a case of GBS, diagnosed at 15 weeks of pregnancy and aggravated in postpartum (Campos da Silva, 2009). 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%) (Furara, 2008).

The treatment of GBS in pregnancy,post-partum and non-pregnant patients is similar including intravenous immunoglobulins (IVIG) therapy, plasmapheresis,and ventilator support if required. Plasmapheresis and IVIG therapy found to improve outcomes with full recovery in 70-80% of patients (Elovaara, 2008). Yerdelen, *et al*. reported a case of GBS in pregnancy (at 34 weeks) with overlapping forms of GBS subtypes, acute motor axonal neuropathy, and ophthalmoplegia. The patient was treated with respiratory support, IVIG therapy, plasmapheresis, and tracheostomy (Yerdelen, 2011). Ventilatory support is required in 25-30% of non-pregnant patients, but respiratory problems may be worse in pregnancy because of reduced inspiratory effort of the diaphragm (Hughes, 2005). In cases requiring ventilator support in pregnancy, the risk of premature birth has been noted to be increased (Vaduva et al., 2006). Bahadur, *et al*. reported a 25-year-old, gravida 3, para 2, woman at 21 weeks of pregnancy with successful maternal and fetal outcome (Bahadur et al., 2009) Goyal, *et al*. have described the management of a primigravida presenting at 26 weeks of gestation with plasmapheresis (Goyal, 2004). Vijayaraghavan *et al*. have also described its management at 16 weeks of pregnancy (Vijayaraghavan et al., 2006).

Conclusion

In conclusion, early suspicion and diagnosis of GBS in pregnancy and post-partum period even after abortion, prompt intensive multidisciplinary supportive care improve the prognosis for both mother and fetus.

Keywords: GBS, pregnancy, abortion

Source of Support: Nil

Conflict of Interest: None.

REFERENCES

Bahadur A., Gupta N., Deka D., Mittal S. 2009. Successful maternal and fetal outcome of Guillain-Barré syndrome complicating pregnancy. *Indian J Med Sci.,* 63:517–8. (PubMed)

Campos da Silva F., de Moraes Paula G., Dos Santos Esteves Automari CV., Mendes de Almeida DS., Ubirajara Cavalcanti Guimarães R. 2009. Guillain-Barre syndrome in pregnancy: Early diagnosis and treatment is essential for a favourable outcome. *Gynecol Obstet Invest*., 67:236–7. (PubMed)

Elovaara I., Apostolski S., van Doorn P., Gilhus NE., Hietaharju A., Honkaniemi J. et al., 2008. EFNS guidelines for the use of intravenous immunoglobulin in treatment of neurological diseases: EFNS task force on the use of intravenous immunoglobulin in treatment of neurological diseases. *Eur J Neurol.,* 15:893–908.(PubMed)

Furara S., Maw M., Khan F., Powell K. 2008. Weakness in pregnancy-expect the unexpected. Obstetric Medicine., 1:99–101.

Goyal V., Misra BK., Singh S., Prasad K., Behari M. 2004. Acute inflammatory demyelinating polyneuropathy in patients with pregnancy. *Neurol India.,* 52:283–4. (PubMed)

Hughes RA., Cornblath DR. 2005. GuillainBarre' syndrome. Lancet. 366:1653–66. (PubMed)

Vaduva C., de Seze J., Volatron AC., Stojkovic T., Piechno S., Husson J. et al., 2006. Severe Guillain-Barre' syndrome and pregnancy: Two cases with rapid improvement post-partum. *Rev Neurol*., 162:358–62.(PubMed)

Vijayaraghavan J., Vasudevan D., Sadique N., Rajeswari KS., Pondurangi M. 2006. Jayshree A rare case of Guillain-Barre' syndrome with pregnancy. *J Indian Med Assoc.,* 104:269–70. (PubMed)

Yerdelen D., Kucukgoz U., Karatas M., 2011. Association between acute motor axonal neuropathy and ophthalmoplegia during pregnancy. *J Clin Neurosci.,* 18:999–1000. (PubMed)

****