|| Print ISSN: 2589-7837 || Online ISSN: 2581-3935 ||
International Journal of Medical Science and Diagnosis Research (IJMSDR)
Available Online at www.ijmsdr.com
NLM (National Library of Medicine ID: 101738825)
Letter to the Editor
Volume 4, Issue 5; May: 2020; Page No. 56-57

TARGETING THE FRIGHT OF MULTIPLE SCLEROSIS IN PREGNANCY

Dr. Ansh Chaudhary[1*], Dr. Bhupendra Chaudhary[2]

[1]Post Graduate Department of Medicine, Bharati Vidyapeeth Medical College & Research Centre, Pune, Maharashtra, India.

[2]Department of Neurology, Jaswant Rai Super Speciality Hospital, Meerut, Uttar Pradesh, India.

Conflicts of Interest: Nil

Corresponding author: Dr. Ansh Chaudhary

Introduction

Multiple Sclerosis (MS) is a chronic inflammatory disease of central nervous system characterised by autoimmune demyelination and scarring of myelin sheath of axons of brain and spinal cord. With high predilection for females (2.5:1) especially so in active reproductive age it has concern with pregnancy and post-partum outcomes. The institution of disease modifying drugs (DMD) during pregnancy with its long term benefits bears some controversy. A bidirectional interrelationship exists between MS and pregnancy. Although MS does no affect fertility but may complicate the pregnancy with preeclampsia, miscarriage, ectopic pregnancy or even prolonged labour requiring close monitoring of such patients. Whereas other auto immune diseases for ex. Rheumatoid arthritis, pregnancy is typically stabilizing period in the clinical course of MS except for small issues like fatiguability, insomnia etc. Thus generally there are no ill effects from pregnancy towards MS.

In Remitting and Relapsing variant of MS (RRMS) the relapse rate of MS are typically reduced by almost 70% especially during third trimester with resurgence in post-partum period both radiologically and clinically. This is due to increased circulating levels of placenta derived oestrogen during pregnancies which have a dampening effect on immune system. The abrupt fall of oestrogen in post-partum period result in intense inflammatory response and thus increases relapse rate.[1] The presence of MS in pregnancy is at times frightening situation for the concerned obstetrician but it is to be highlighted that a normal delivery with or without epidural anaesthesia can be achieved safely in these patients. Those with paraparesis and diminished sensation below T11 should have special training regarding onset of labour symptoms. As against the common belief breast feeding should be allowed rather encouraged.[2]

An acute attack or even relapse of MS in pregnancy should be managed safely with intravenous methyl prednisolone. The use of intravenous interferon beta and glatiramer acetate is also safe but there is no recommendation for regular use of methyl prednisolone or immunoglobulins in preventing post-partum relapse. The implementation of disease modifying drugs in MS pose a challenge in regards to their

teratogenic potentials and associated fear with resultant delay in initiation.[3] There are sufficient data to support that delay in starting of DMD or stopping them is associated with higher incidence of relapse rate and a long term negative effect. The use of highly efficacious DMD like natalizumab, fingolimod, dimethyl fumarate to control MS in pregnancy, outweighs their benefits and supports early institution of these drugs in pregnancy.[4] A better knowledge regarding teratogenic potential, pharmacokinetics and dynamics of these DMD by large

multicentric controlled trials will help us to deal this situation in a better way with favourable outcome.

Funding: No funding sources

Ethical Approval: Not required

References

1. Buraga I, Popovici RE. Multiple sclerosis and pregnancy: current considerations. Sci World J 2014; 2014: 513160.

2. Kelly VM, Nelson LM, Chakravarty EF. Obstetric outcomes in women with multiple sclerosis and epilepsy. Neurology 2009;73: 1831-6.

3. Lu E, Dahlgren, L, Sadovnick A, Sayao A, Synne A, Tremlett H. Perinatal outcomes in women with multiple sclerosis exposed to disease-modifying drugs. *Mult Scler* 2012; 18:460-7.

4. Alroughani R, Altintas A, Al Jumah M, Sahraia M, Alsharoqi I, AlTahan A et al. Pregnancy and the use of disease -modifying therapies in patients with multiple sclerosis: benefits versus risks. Mult Scler Int 2016; 2016:1034912.