CASE REPORT

AN INTERESTING CASE OF RECURRENT OPTIC NEURITIS WITH DIPLOPIA - ANTI MOG ANTIBODY DISEASE

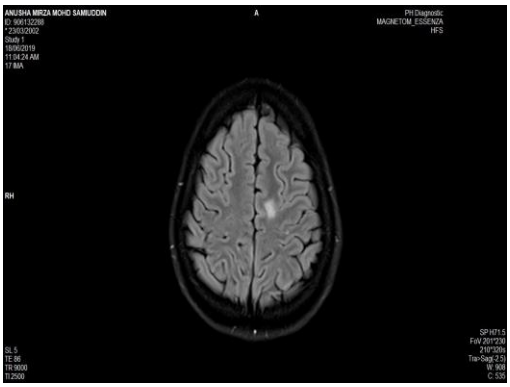
17 years old female patient had come with acute onset of Diplopia, vertigo and imbalance on walking, clinically had nystagmus to the right, left partial internuclear ophthalmoplegia and mild gait ataxia. Her MRI Brain was s/o multiple areas of demyelination with contrast enhancement. Patient also gave h/o two previous episodes of optic neuritis, first one in November 2018 wherein she had left eye visual blurring which improved spontaneously over 4 weeks and the second one was in February 2019 wherein she has right eye blurring of vision, this time she was treated with 5 doses of 1gm IV methyl Prednisolone following which her vision improved completely, she was on a tapering schedule of oral steroids which was stopped over 8 weeks. Her MRI Brain done in March 2018 was normal.

Her lab investigations including ANA and Anti NMO antibody assay was negative, her CSF done showed > 10 Oligoclonal bands highly s/o CNS Demyelination, and her Anti MOG antibody assay was strongly positive. She was started on 5 doses of IV methyl prednisolone 1gm and was continued on oral steroids 1mg/kg/day. She was also started on Mycophenolate 2gms daily, with the plan to taper and continue oral steroids at a minimum dose of 10mg/day.

Anti MOG antibody disease is a type of Demyelinating disease which predominantly affects the Optic nerves, Brain and the spine. It shares its clinical characters which are very similar to that of Neuro Myelitis Optica. Usually affects young females more than males in the second to fourth decade and presents as recurrent Optic neuritis, transverse myelitis or Acute Demyelinating Encephalomyelitis (ADEM). It has a relapse rate of 44-83%. MRI lesion are typically bilateral at onset and are more fluffy compared to NMO or MS, with more than one third of the lesions involving the brainstem and thalamus. The treatment will be lifelong immunosuppressive like Azathioprine, Mycophenolate or Rituximab, also it is recommended to continue a small dose of oral steroids since most relapse is seen after stopping steroids even when the other immunosuppressive is on.

To conclude, Ant MOG Antibody disease is now recognized as a distinct nosological entity with specific management and therapeutic requirements.

MRI BRAIN FLAIR



MRI BRAIN POST CONTRAST