DEMYELINATING DISORDERS AND ANTI-MYELIN OLIGODENDROCYTE GLYCOPROTEIN ANTIBODIES: A CASE REPORT

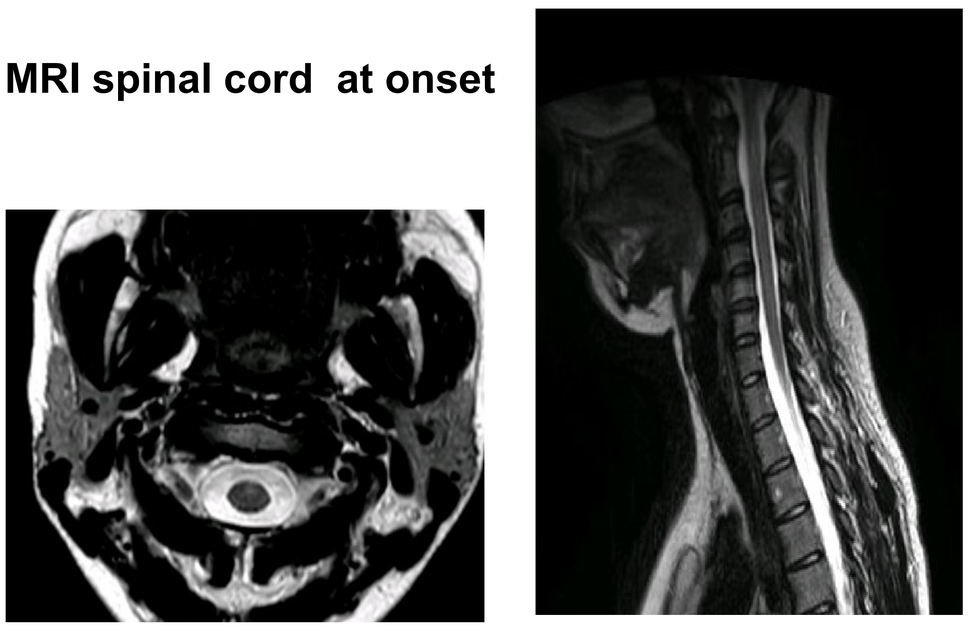
F.Matta[1],D. Maimone[1],G. Vitale[1], C. Di Lorenzo[2], E. Saracco[1], D. Restivo[1], S. Mariotto[3], S. Ferrari[3], S. Monaco[3],A. Pavone[1].

[1]U.O. Neurologia Arnas Garibaldi Catania – [2] U.O. Neuroradiologia Arnas Garibaldi Catania
[3] Sezione di Neurologia Clinica- Dipartimento di Scienza Neurologiche, Biomedicina e Movimento Università degli Studi di Verona

A 25 years-old woman with sudden right eye visual loss .
- MRI brain evaluation at onset : normal
- MRI spinal cord evaluation at onset: a T2 hyperintense lesion at C2 level (extending for less than three contiguous segments).
-AQP4 antibodies, ANA, AMA, ASMA, nDNA and ENA : negative.
- Anti **MOG antibodies** : higly positive (titer of **1/320**).
- Oligoclonal bands : unknown (hasn't given the consent to spinal tap)
- No responder to Steroid therapy (1g /die x 5): repeated twice.
Two weeks after cessation of steroid therapy, the patient developed psychomotor agitation with delirium and was treated in a psychiatric hospital.

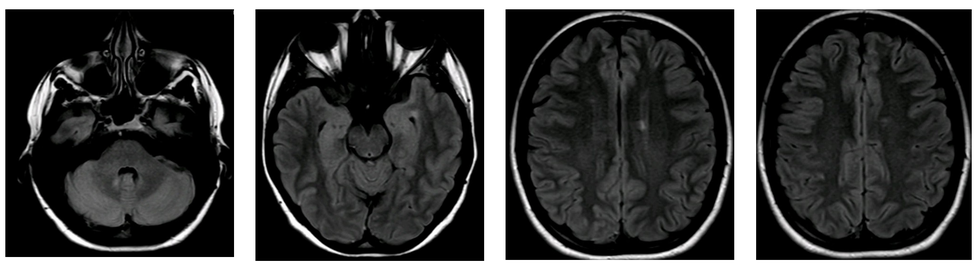
NORB- anti MOG positive

MRI spinal cord at onset

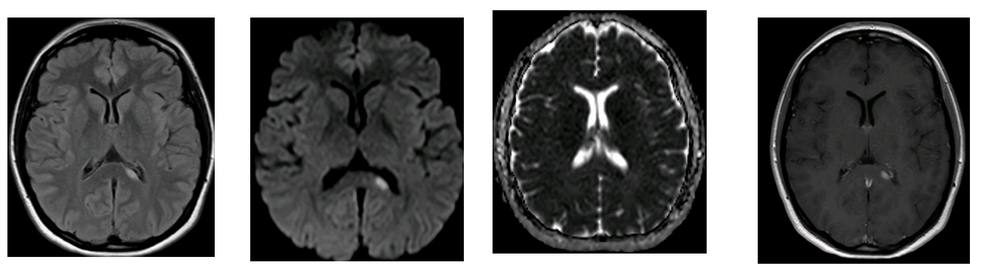


Two months later from onset:
- **brain MR scan** was performed showing : five new T2 FLAIR hyperintense lesions involving right middle cerebellar peduncle , left periventricular temporal white matter, right periventricular and left supraventricular frontal white matter, iuxtacortical right parietal and corpus callosum splenium; the latter was a Gadolinium-enhancing lesion.
-Distribution of lesions met criteria for radiological diagnosis of Multiple Sclerosis.
- No responder to Cyclophosphamide therapy.
- No responder to IGIV.
-**Oligoclonal bands in the CSF: 6 bands** (Pattern 2).

SM- anti MOG positive

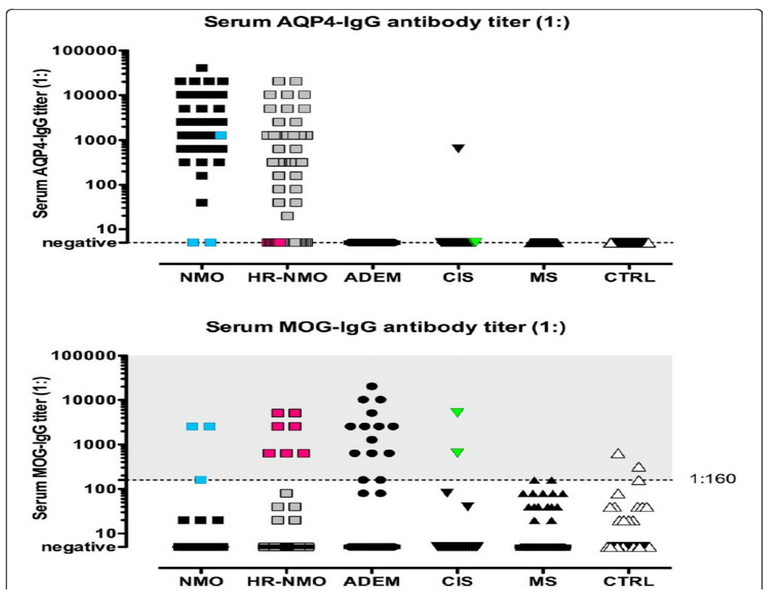


MRI brain two months later from onset



Discussion:

MOG is a component of myelin and an antigen target in CNS's demielination. Immunization with MOG induces experimental autoimmune encephalitis and MOG antibodies contribute to CNS demielination in animal models.
In our patient steroid-unresponsive optic neuritis and high titer of anti-MOG antibodies pointed t out a diagnosis of NMOSD, but brain and spinal cord MRI were more indicative of MS.
The existence of oligoclonal bands in the cerebrospinal fluid (pattern 2) was indicative of MS .



Conclusion:

Clinical relevance of anti-MOG antibodies in adults is unclear as only a minority of patients with MS and NMO/NMOSD is sieropositive. Our case report is an expression of this reality.

Bibliografy:

MRI criteria for the diagnosis of multiple sclerosis: MAGNIMS consensus guidelines.
Filippi M[1], Rocca MA[2], Ciccarelli O[3], De Stefano N[4], Evangelou N[5], Kappos L[6], Rovira A[7], Sastre-Garriga J[8], Tintorè M[8], Frederiksen JL[9], Gasperini C[10],Palace J[11], Reich DS[12], Banwell B[13], Montalban X[8], Barkhof F[14]; MAGNIMS Study Group.

Complement activating antibodies to myelin oligodendrocyte glycoprotein in neuromyelitis optica and related disorders
S.Mader1 , Viredler1 , K.Schanda1 , K.Rostasy2 ,Dujmovic3 , K.Pfaller4 , A.Lutterotti1, S.Jarius5, F.Di Pauli1, B.Kuenz1, R.Ehling1, H.Hegen1,F.Deisenhammer1, F.Enein6, M.K Storch7, P.Koson8,9, J.Drulovic 3,10,
W. Kristoferitsch11, T.Berger1 and M.Reindl1*

Sin

XLVII CONGRESSO NAZIONALE
22-25 OTTOBRE 2016 – VENEZIA

WebPoster