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Editorial on EJPN focus section on E.U. paediatric MOG consortium consensus statements

In recent years, several paediatric monophasic and multiphasic immune-mediated acquired demyelinating syndromes (ADS) like acute disseminated encephalomyelitis, optic neuritis and transverse myelitis have been shown to be associated with the presence of antibodies targeting myelin oligodendrocyte glycoprotein (MOGab), a small yet important component of the myelin sheet [1]. As these MOG-ab-associated disorders (MOGAD) are rare and clinically diverse there is a need for consensus on both the clinical classification and management of these children, that is currently lacking. Therefore, members of the E.U paediatric MOG consortium met first in Paris in January 2020 and had thereafter three subsequent web-based meetings following the COVID-19 outbreak.

In the focus section of this issue of the European Journal of Paediatric Neurology (EJPN) the authors report the results and recommendations derived from their meetings. Four working groups were formed on the different aspects of MOGAD in children such as clinical characteristics of the various subtypes, radiological features, role of MOG-ab in the disease process and outcome of children with MOGAD [1–4]. The whole group then worked on a statement regarding the acute and maintenance treatment of paediatric MOGAD [5].

Part 1 reviews the clinical features of the different monophasic and multiphasic clinical subtypes of paediatric MOGAD and introduces a clinical classification of MOGAD [1]. In part 2 the radiological features of these entities are delineated in addition to an overview of the differences between of the radiological features of paediatric MOGAD and other ADS like multiple sclerosis and aquaporin-4 mediated diseases [2]. Part 3 deals with the diagnostic properties of the different available assays for MOG-ab testing addressing the clinical value and importance of serial MOG-ab testing and the potential role of other biomarkers like neurofilament light chai [3]. The outcome of paediatric MOGAD for which only limited relevant data exists, is discussed in part 4. The working group addressing this important aspect suggests a detailed set of outcome assessment tools that can be used in the spectrum of clinical entities and age-groups within paediatric MOGAD [4]. The final part of this focus section deals with the important but also complex issue of acute and maintenance treatment which has been discussed in depth within the group. Again, due to the rarity of MOGAD and in particular the relapsing forms and lack of structured prospective treatment evaluations the consortium members formulated two protocols - one addressing the acute management and the other maintenance therapy - that respected different treatment strategies within the group. In addition, part 5 also provides rationales for both initiation and cessation of treatment options [5]. With these first international consensus statements we aim to provide an overview of existing data and guidelines for the management of paediatric MOGAD. Importantly the many group discussions also made clear the need for further international prospective evaluation of MOGAD including acute and maintenance treatment.

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