

MS Clinical Care *Connection*

Caring for Children and Teens with MS

Winter 2014

Patient Resources

MS Navigator 1-800-344-4867

Pediatric MS Centers
nationalMSSociety.org/pedMScenters

Partnering with Your Children's School
youtu.be/Fhz4qb84K_0
(video)

Pediatric MS Support
nationalMSSociety.org/pednetwork

Affordable Care Act (ACA) Information
nationalMSSociety.org/ACA

Society Scholarships
nationalMSSociety.org/scholarship

Clinician Resources

Difficult case discussions with pediatric MS neurologists
nationalMSSociety.org/pedMScases

A free mobile app for MS healthcare professionals is available on iPhone, Android or Windows. ntl.ms/clinicalapp
Made possible by Bayer HealthCare, Novartis and Questcor Pharmaceuticals, Inc.

ACA information for:
Physicians ama-assn.org/resources/doc/washington/hsr-booklet.pdf

Nurse practitioners aanp.org/legislation-regulation/federal-legislation/affordable-care-act-aca

Studies estimate that between 2 and 5% of all people with MS develop first symptoms before age 18. Diagnosis may be challenging, as symptoms are often attributed to other, more common childhood disorders (hindawi.com/journals/ad/2013/673947/abs/); however, improved definitions for pediatric demyelinating diseases have led to increased recognition of MS in young patients (msj.sagepub.com/content/early/2013/04/08/1352458513484547.abstract).

The Network of Pediatric MS Centers is recruiting children and teens with MS within the first four years of disease onset for an NIH-funded study on genetic and environmental risk factors of MS (16 sites). Contact janace.hart@ucsf.edu or call 415-514-2476.

Long-term outcomes and disease course

Two studies (Gorman et al., 2009 ncbi.nlm.nih.gov/pubmed/19139299 and Carbonell et al., 2013 ncbi.nlm.nih.gov/pubmed/24065582) found a significantly higher relapse rate in pediatric compared to adult patients, and while there were study limitations, they suggest that pediatric onset may represent a more inflammatory disease course.

A recent study suggests that obesity may be associated with risk of pediatric MS in girls (ncbi.nlm.nih.gov/pubmed/23365063?dopt=Abstract) but not boys.

Cognitive and psychiatric features

Approximately 1/3 of children and adolescents with MS experience some cognitive difficulty (Amato, 2008 ncbi.nlm.nih.gov/m/pubmed/18474844/; Amato, 2010 neurology.org/content/75/13/1134; Till, 2011 ncbi.nlm.nih.gov/pubmed/21534686; Julian, 2013 jcn.sagepub.com/content/28/1/102.abstract). Studies identified the following affected areas: verbal memory, complex attention, verbal fluency, receptive language, visuo-motor integration, fine motor coordination and information processing speed.

Other studies have noted anxiety, attention deficit disorder and mood disorders, and found these children to be at increased risk for cognitive deficits (ncbi.nlm.nih.gov/pubmed/24072721). Children with MS can experience challenges in school and everyday activities (neurology.org/content/75/13/1134).

Treatment

Studies have shown that the self-injectable DMTs are safe and well tolerated in children (ncbi.nlm.nih.gov/pubmed/21439455). Research also suggests that natalizumab — typically reserved for children who do not respond to the injectable DMTs — is safe in this population (msj.sagepub.com/content/early/2013/02/07/1352458512471878). There are no current data available on safety or tolerability of the oral DMTs in the pediatric population.



For additional information for healthcare professionals and MS researchers, including research and clinical updates, and professional publications and tools to support your practice, or to find your local office, get involved with Society activities, and refer your patients to Society programs and services, please visit: www.nationalMSSociety.org.