Pediatric Onset Multiple Sclerosis

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What is Pediatric Onset Multiple Sclerosis (POMS)?
Multiple Sclerosis is an autoimmune central nervous system disorder that affects the brain and spinal cord. When an individual is less than 18 years of age, it is typically referred to as Pediatric Onset Multiple Sclerosis (POMS). Between 3% and 5% of all POMS cases have an onset before 16 years of age.1-3

The symptoms of POMS are similar to those experienced by adults with MS and may include deficits in vision, sensation, balance, bowel and bladder function, muscle strength, muscle tone, and coordination. They also may experience fatigue, cognitive challenges, and psychological issues.4-7 The pediatric presentation appears to be more variable in terms of gender, ethnicity, and symptoms compared to the adult population.1 The first attack may involve one or multiple symptoms, but pediatric cases tend to recover quicker than adults.1 Children younger than 10 years of age may experience multiple symptoms during an attack.1 Approximately 95% of people with POMS have a relapsing-remitting pattern of disease.1

Differences between POMS and Adult-onset MS.
Research suggests that children with POMS experience:1,4-7

- Greater annual relapse rate early in the disease
- Slower disease progression in early years
- Ambulatory difficulties at an earlier age due to early disease onset
- Challenges particularly with attention, problem solving, and language skills

Unique issues for children with POMS are:

- Lack of awareness in the medical, educational, and general public about POMS
- Greater struggles dealing with the “invisible symptoms” such as fatigue, depression, and memory issues
- Feeling of isolation, not only for the child, but also the family
- Unique challenges due to the need to work with the school district in constructing an education plan specific to their child’s needs due to the unpredictable nature of the disease

Medical Treatment
Treatment of POMS is divided into three categories:

- Disease modifying therapies (drugs used to slow the progression of the disease)
- Treatment of relapses or “attacks”
- Symptom management
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How can physical therapy (PT) help in POMS?
Due to the complexity of the disease, POMS is best managed using a multidisciplinary approach that is centered on the child and family. It is also important to seek out a PT who is familiar with MS and is aware of the challenges faced by those with POMS. A PT will evaluate how the child or adolescent moves during typical daily activities and ask questions related to the challenges they may face in their school, home, and community environment. Treatment will focus on age-related challenges that are relevant to their everyday challenges and goals will be child and family centered.

A PT will recommend specific activities and/or exercises to address deficits in:
- Strength
- Balance
- Walking
- Endurance
- Flexibility
- Coordination
- Fatigue

What other healthcare providers may be consulted to help with POMS?
You may consult with neurologists, occupational therapists, speech language pathologists, social workers, neuro-ophthalmologists, and psychologists.

Additional Resources
https://www.nationalmssociety.org/For-Professionals/Clinical-Care/Managing-MS/Pediatric-MS

References

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