

Importance of Early Diagnosis and Treatment of MS



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Updates to the classification and diagnostic criteria, McDonald 2017, have facilitated more rapid identification and formal diagnosis of relapsing multiple sclerosis (MS). The same concepts of dissemination in space and time remain, but the inclusion of the biomarker, oligoclonal banding, among the dissemination in time criteria have expanded our ability to diagnose MS in its earliest stages. The category of clinically isolated syndrome (CIS) has decreased dramatically with these new diagnostic criteria, and we can now reinterpret the CIS trials as studies of delayed versus early treatment of relapsing MS.

Once a decision has been made to start treatment, the next hurdle is selecting an efficacy tier. There is brisk debate among MS neurologists of the best therapeutic strategy: escalation from modest to moderate to high efficacy as the disease

demand; initial treatment with a high efficacy immunotherapy; or induction therapy with a high efficacy immunotherapy such as alemtuzumab or cladribine that causes an immune reconstitution effect. The relative merits and drawbacks will be described for each approach.

The topographical model of MS disease course may help us conceptualize the pathologic process going on in early MS, so that we may engage patients in the complex decision making process of choosing among more than a dozen approved MS treatments.

Additionally, we will review neurofilament light as a candidate biomarker to guide personalization of immunotherapy plan beyond what is known with MRI techniques.

Though fiercely debated, individuals with radiologically isolated syndrome (RIS) may have a form of “prodromal” or “pre-symptomatic” MS. We will describe the current state of knowledge on RIS and include a clinical trial update for an ongoing RIS study. We predict that the leading edge of early treatment may still move earlier into this pre-symptomatic phase to disrupt inflammatory and degenerative disease processes before an individual has had a clinical event.