

Clinical Pearls: Implementing Critical Advances in MS Treatments



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This talk covers four topics. The first topic discusses the current therapeutic approach to MS. Treatment principles and practice guidelines have emerged. There are also important lessons to learn from other organ-specific immune-mediated diseases, such as rheumatoid arthritis. Current strategies involve early treatment (within 6 months of the first MS attack), shared decision making, assessment of disease activity and prognostic profile, following a treat-to-target approach, emphasizing the importance of following a wellness program, and close clinical and MRI surveillance follow up. There should not be hesitation to switch disease modifying therapies (DMTs) if there are significant issues or unacceptable

breakthrough activity. The pros and cons of escalation vs. highly effective or durable/induction therapy are still being evaluated. Highly effective therapy should be used for very active MS patients.

The second topic covers novel therapeutic approaches: B cell therapies, nanotechnology, and the gut microbiome. The recent success of focused B cell therapies indicates how important this immune population is for MS; several novel agents are in development. Nanotechnology is being used to deliver very small particles to the CNS; and may play an increasing role in CNS repair strategies. Finally, exciting preliminary findings suggest manipulation of the gut microbiome may be a future target to manipulate MS.

The third topic covers clinical considerations with regard to determining DMT risks and benefits. In particular infection, malignancy, and comorbidity risks will be discussed.

The fourth and final topic considers the implications of immunosenescence for the aging individual with MS.