Diagnosing MS, Mimics, and Myelopathies: Clinical Pearls and Pitfalls

Program Director  Claudia F. Lucchinetti, MD, FAAN, Rochester, MN

Program Description
The diagnosis of MS remains rooted in the principle of dissemination in time and space. However, as our understanding of the heterogeneity of MS evolves, a greater appreciation of the spectrum of idiopathic inflammatory CNS demyelinating disorders, as well as acute/subacute myelopathies is needed in order to reliably distinguish MS from other CNS demyelinating disorders or non-demyelinating disease mimics. This case-based course will define the clinical forms, temporal course, and natural history of MS; discuss the clinical, radiographic and pathologic spectrum of CNS inflammatory demyelinating diseases; describe clinical, laboratory and radiographic red flags that may suggest an alternative diagnosis, and present an approach in the evaluation of acute/subacute myelopathies.

Learning Objectives
Upon completion, participants should be able to define the clinical forms, temporal course, and natural history of MS; discuss the impact of treatments on the natural history of MS; appreciate the spectrum of the CNS idiopathic inflammatory demyelinating disorders; recognize the red flags that suggest an MS disease mimic; define an approach in the evaluation of acute/subacute myelopathies; and recognize distinct clinical-MRI patterns that may aid in accurate diagnosis in patients presenting with an acute/subacute myelopathy.

Recommended Audience
Trainee; General Neurologist; Specialist Neurologist; Non-neurologist; Advanced Practice Provider

Core Competencies
Medical Knowledge; Patient Care; Practice-based Learning and Improvement; Systems-based Practice

Schedule
8:00 a.m.–8:55 a.m.  MS: Clinical Forms, Diagnosis, and Natural History  Brian G. Weinshenker, MD, FAAN, Rochester, MN

8:55 a.m.–9:50 a.m.  The Spectrum of MS and Its Mimickers  Claudia F. Lucchinetti, MD, FAAN, Rochester, MN

9:50 a.m.–10:05 a.m.  Break

10:05 a.m.–11:00 a.m.  An Approach to the Diagnosis of Myelopathies  Dean M. Wingerchuk, MD, FAAN, Scottsdale, AZ

RECOMMENDED COMPANION COURSE  –  PAGE 17
Remyelination and Repair in Multiple Sclerosis
Program Description
Multiple sclerosis pathology is highlighted by demyelination, inflammation, and axonal damage. Remyelination occurs but is variable and hindered. Promoting remyelination, either through exogenous means or by promoting endogenous differentiation of oligodendrocyte precursor cells into mature oligodendrocytes, is an area of intense interest in multiple sclerosis therapeutics. Faculty will discuss the biology of demyelination and remyelination, how remyelination can be evaluated using advanced imaging (MRI and PET) techniques, and how compounds with remyelinating potential can be screened and selected for further study. The current status of remyelinating therapies in clinical trials will be reviewed. Interactive case discussions will be included.

Learning Objectives
Participants should become familiar with the process of remyelination and repair in the central nervous system. Participants should become familiar with emerging remyelinating therapeutics for multiple sclerosis. They should be equipped to improve their management of patients with multiple sclerosis.

Recommended Audience
Trainee; General Neurologist; Specialist Neurologist; Non-neurologist; Advanced Practice Provider

Core Competencies
Medical Knowledge; Patient Care

Schedule

1:15 p.m.–1:30 p.m.
Introduction
Eric Klawiter, MD, Boston, MA

1:30 p.m.–2:15 p.m.
The Biology of Demyelination and Remyelination in MS
Jack P. Antel, MD, FAAN, Montreal, QC, Canada

2:15 p.m.–3:00 p.m.
Use of Imaging to Evaluate Remyelinating Therapies
Eric Klawiter, MD, Boston, MA

3:00 p.m.–3:15 p.m.
Break

3:15 p.m.–4:00 p.m.
Rapid Screening of Compounds and Therapies in Clinical Trials
Ari Green, MD, San Francisco, CA

4:00 p.m.–4:15 p.m.
Recap and Questions
Faculty