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TREATMENT OF NMOSD IN RESOURCE-RICH AND RESOURCE-CHALLENGED REGIONS

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- I serve as a co-editor for Multiple Sclerosis Journal and associated editor for Journal of Clinical Neurology.

- I hold no personal shares in any pharmaceutical company.

- There are some off-label contents in this talk

Learning Objectives

- To understand the main goal of NMOSD treatment
  - Given significant irreversible disability arises from incomplete recovery from NMOSD attacks, the goal of NMOSD treatment is to promptly address acute inflammatory attacks and to prevent future attacks to minimize CNS damage and preserve neurologic function

- To learn the treatment options and strategies to achieve this goal

Key Messages

- NMOSD attacks often lead to significant disability, where lost function is poorly recovered and subsequent attacks lead to a cumulative disability.
- Management of NMOSD includes acute as well as long-term treatment.
- The initial treatment of acute attacks consists of IVMP for at least 3–5 consecutive days. Escalatory or rescue treatments for patients who fail to recover substantially with IVMP include plasma exchange, immunoabsorption and intravenous immunoglobulin.
- Before 2019, there were no approved therapies for AQP4-IgG–seropositive NMOSD; maintenance treatments, although empirically identified as being potentially beneficial in sustaining remission, were all off-label. These included rituximab, azathioprine, mycophenolate mofetil, methotrexate, tocilizumab, and oral corticosteroids.
- The recent advancement in our understanding of the pathophysiology of NMOSD has revolutionized the management options and resulted in the introduction of approved medications including eculizumab/ravulizumab, inebilizumab and satralizumab.
- This choice of attack prevention therapy should be based on the following factors: attack severity/recovery, efficacy/safety, onset/mode of action, comorbidities, age, family planning, patient preferences, adherence, and availability/costs.

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