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## Plasma exchange as a first line therapy in acute attacks of Neuromyelitis Optica Spectrum Disorders

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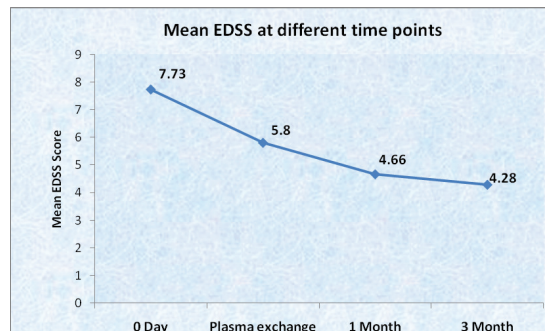
**Background:** Neuromyelitis Optica Spectrum Disorder (NMOSD) is a demyelinating disorder of central nervous system with deleterious effects. At present Intravenous corticosteroids are used for the relapse as the first line of treatment, but with only a class evidence III-IV. Having an underlying humoral immune mechanism in the pathogenesis of NMOSD and as it is rightly said that “**Time is Cord and Eyes**”, delaying the time to start plasma exchange (PLEX) awaiting favorable outcome in response to corticosteroids is detrimental for the patient. Hence PLEX may be a promising first line therapeutic approach in the management of severe attacks of NMOSD.

**Objective:** To evaluate the efficacy of PLEX as the first line of treatment for the acute attacks in patients with NMOSD, that is being largely used as an add-on therapy for more than 10 years and also to define the time opportunity window for the starting of PLEX.

**Materials and methods:** After institutional ethical committee clearance the study was conducted to analyse the therapeutic efficacy and safety profile of PLEX as a first line therapy in thirty patients diagnosed with NMOSD over a period of thirty months. PLEX was performed using a Hemonetics Mobile Collection Systemplus machine with due written consent including the risks and benefits of the treatment that is being proposed to the patient/relative in their own language.

**Results:** A total of 30 patients were analysed, out of which 16 were females and rest males. Eighty five percent of the patients were in the age group of 25 to 35 years. All the

patients had severe Expanded Disability Status Scale (EDSS) scores at the baseline, and 73.33% showed significant




improvement following PLEX. The only predictor of good outcome was the time to PLEX i.e. shorter delay better is the outcome.

**Conclusion:** The study ascertained the importance of early PLEX as a therapeutic intervention in severe attacks of NMOSD irrespective of their Anti-Aquaporin 4 (AQP4) antibody status.

### Biography

BL Kumawat is currently working as a senior professor of neurology at SMS Medical College and Hospital at Jaipur, Rajasthan, in India. He studied DM Neurology in Medical College Jaipur. He has been awarded twice for his outstanding work in the college. He also presented and published his work many times in the international forums and journals.

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