EDITORIAL COMMENTARY



The Curious Story of Recurrent Guillain-Barré Syndrome; A Lot More to Know

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Recurrent Guillain-Barré syndrome (GBS) is an uncommon phenomenon that deviates from the typical monophasic nature of the condition. While GBS usually follows a single episode and most individuals recover fully or partially, recurrent cases pose unique challenges. The concept of recurrent Guillain-Barré syndrome (GBS) is still evolving, and several knowledge gaps persist.

The study by Sudeep KC et al. published in IJP describes the clinical profile, management, and outcome of recurrent GBS in 11 children in a cohort of 234 GBS cases [1]. They reported an incidence of 4.7% for recurrent GBS, similar to other studies done in adults [1, 2]. Preceding gastrointestinal and respiratory infections in the first episode were significantly associated with recurrence, no other difference was noted between the non-recurrent and first episode of recurrent cases. The first and subsequent episodes in recurrent cases were similar in clinical course and outcome [1]. A considerable incidence of GBS cases during the COVID-19 pandemic recently, reinforces the role of various environmental and/or infectious triggers as a precipitant [3, 4]. The current study reported Acute Motor Axonal Neuropathy (AMAN) as the most common recurrent as well as non-recurrent variant compared to Acute inflammatory demyelinating polyneuropathy (AIDP) subtype reported by several studies in the past in various ethnic groups (1/112) as the predominant variant [1]. In Latin American and Asian countries (except Japan), AMAN is commoner compared to Europe and North America. A plausible reason for this is the increased prevalence of Campylobacter jejuni infection in Asia. The clinical phenotype reported from Asia (the majority being AMAN) also has a more severe phenotype compared to Europe and North America [5].

In terms of the association of seropositivity for antiganglioside antibodies in the first episode with subsequent recurrences, results from limited studies till date are conflicting [1]. Prospective multicentric studies should be planned to identify clinical, electrophysiological and immunological markers predictive of recurrence in GBS. Developing reliable predictive markers or tools can help identify individuals who may benefit from closer monitoring or preventive interventions including long-term immunomodulation. With AMAN being relatively common in our part of the world and having a more severe phenotype, understanding its impact on quality of life, potential residual effects, and optimal management for sustained well-being is an obligatory area that requires further investigation. Continued research endeavors are essential to enhance our understanding of recurrent GBS, paving the way for more effective prevention, management, and improved outcomes for individuals facing this rare and complex condition. Tailoring treatment approaches for recurrent GBS is an ongoing challenge. Determining whether standard GBS treatments are equally effective in recurrent cases or if modifications are necessary is an essential aspect of improving clinical management.

Declarations

Conflict of Interest None.

References

- Sudeep KC, Bansal A, Randhawa MS, et al. Recurrent Guillain-Barré syndrome: clinical profile and outcome. Indian J Pediatr. 2023. https://doi.org/10.1007/s12098-023-04746-y.
- Kuitwaard K, Van Koningsveld R, Ruts L, Jacobs BC, van Doorn PA. Recurrent Guillain-Barre syndrome. J Neurol Neurosurg Psychiatry. 2009;80:56–9.
- Akçay N, Oğur M, Menentoglu ME, Sofuoğlu Aİ, Işik İ, Şevketoğlu E. Recurrent GBS with COVID-19 in a child: a case report. Pediatr Infect Dis J. 2023;42:e129–30.

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- 4. Saini L, Krishna D, Gunasekaran PK, et al. Clinical profile, follow-up, and role of neuroimaging in pediatric Guillain-Barré syndrome in the COVID era: an ambispective study. J Child Neurol. 2023;38:407–13.
- 5. Papri N, Islam Z, Leonhard SE, Mohammad QD, Endtz HP, Jacobs BC. Guillain-Barré syndrome in low-income and

middle-income countries: challenges and prospects. Nat Rev Neurol. 2021;17:285–96.

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