Int. j. adv. multidisc. res. stud. 2026; 6(6):1219-1220

Received: 07-11-2026
Accepted: 17-11-2026

International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

Letter to the Editor

Before an Isolated Abducens Nerve Palsy is Attributed to GBS, all Alternative Causes should be Carefully Ruled Out

Josef Finsterer
Department of Neurology, Neurology & Neurophysiology Center, Vienna, Austria

Corresponding Author: **Josef Finsterer**

Letter to the Editor

We read with interest the article by Felipe *et al*. regarding a 56-year-old man who developed Guillain-Barré syndrome (GBS)—manifesting as isolated abducens nerve palsy, following septic arthritis of the knee [1]. The patient was discharged while receiving antibiotic therapy but declined immunotherapy for the GBS [1]. While the study is noteworthy, several points warrant discussion.

First, the diagnosis of GBS appears questionable, as alternative causes for the abducens nerve palsy were not adequately ruled out [1]. Common causes of sixth cranial nerve palsy include microvascular ischemia (e.g., associated with diabetes or hypertension), traumatic brain injury, neoplasms, stroke, and aneurysms. Furthermore, abducens nerve palsy can be caused by viral infections, elevated intracranial pressure, meningitis, Lyme disease, ear infections, demyelinating diseases (e.g., multiple sclerosis, vasculitis), or advanced age [2]. Were all these potential causes of the abducens nerve palsy excluded?

A second point concerns the inadequacy of the cerebral imaging performed [1]. To determine whether the abducens nerve palsy resulted from an intracerebral or intracranial lesion, a contrast-enhanced cerebral MRI would have been appropriate. Similarly, magnetic resonance angiography could have clarified whether vascular issues such as an aneurysm, dissection, or vasculitis—were potential causes of the nerve palsy. Associations between abducens nerve palsy and conditions such as vasculitis or carotid artery aneurysms in the cavernous sinus region have previously been reported [3, 4].

The third point is that elevated cerebrospinal fluid (CSF) protein levels are a nonspecific finding. In addition to GBS, CSF protein levels can also be elevated due to blood-brain barrier disruption, spinal cord blockage or obstruction, endocrine disorders (e.g., hypothyroidism, diabetes), metabolic disorders, medications, toxins, trauma, subarachnoid hemorrhage, or brain tumors [5]. Have these causes of elevated CSF protein levels been adequately ruled out?

The fourth point is that no follow-up examination was reported [1]. Although an ophthalmological follow-up was planned for the patient, no results from this examination were provided [1]. Furthermore, there is no mention of whether or not the CSF analysis was repeated.

The fifth point is that the trigger for the GBS was not specified [1]. Was the trigger the pathogen responsible for the sepsis, or was it something else, such as a bacterial, fungal, viral, protozoal, or parasitic pathogen, vaccination, or an immunological disorder? Even though the patient was diagnosed with sepsis, the cause of the sepsis and the cause of the GBS are not necessarily the same.

In summary, alternative potential causes must be adequately ruled out before attributing unilateral abducens nerve palsy to GBS.

Declarations

Ethical approval: Not applicable.

Consent to participation: Not applicable.

Consent for publication: Not applicable.

Funding: None received.

Availability of data and material: All data are available from the corresponding author.

Completing interests: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Author contribution: JF was responsible for the design and conception, discussed available data with coauthors, wrote the first draft, and gave final approval. xx: Contributed to literature search, discussion, correction, and final approval.

Acknowledgements: None.

AI tools: Were not used.

Keywords: Abducens Palsy, Guillain-Barre Syndrome, Cerebrospinal Fluid, Nerve Conduction Studies, Sepsis

References

1. Felipe A, Kalu M, Ameli P, Culpepper K. Acute Isolated Abducens Nerve Palsy Associated with Anti-GM1 IgM: A Rare Guillain-Barré Syndrome (GBS) Variant. Neurohospitalist, 2026, 19418744261491388. Doi: 10.1177/19418744261491388
2. Graham C, Gurnani B, Mohseni M. Abducens Nerve Palsy. [Updated 2023 Aug 24]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing, January, 2023. Available from: https://www.ncbi.nlm.nih.gov/books/NBK482177/
3. Hoz SS, Ma L, Ismail M, Al-Bayati AR, Nogueira RG, Lang MJ, *et al*. Intracranial aneurysms and abducent nerve palsy. Surg Neurol Int. 2024; 15:207. Doi: 10.25259/SNI_379_2024
4. Nakajima K, Yoshida T, Nishikawa K, Kora K, Yokoyama A, Yano N, *et al*. Isolated sixth nerve palsy as an initial presentation of primary angiitis of the central nervous system. Brain Dev. 2021; 43(8):884-888. Doi: 10.1016/j.braindev.2021.05.003
5. Asgari M, de Zélicourt DA, Kurtcuoglu V. Barrier dysfunction or drainage reduction: Differentiating causes of CSF protein increase. Fluids Barriers CNS. 2017; 14(1):14. Doi: 10.1186/s12987-017-0063-4