



Vacunas

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Letter to the editor

Early diagnosis and treatment of SARS-CoV-2 vaccination associated polyradiculitis improves outcome



El diagnóstico y el tratamiento precoz y de la polirradiculitis asociada a la vacuna frente al SARS-CoV-2 mejora el resultado

We read with interest the article by Sosa-Hernández and Sánchez-Cardoza about a 23 years old male who developed quadraparesis (M3) one day after the second dose of the BNT162b2 vaccine (BNV) resulting in the inability to walk or accomplish daily activities.¹ His previous history was positive for glomerulonephritis, hypothyroidism, arterial hypertension, surgery for atrial septal defect, and multiple allergies.¹ His current medication included mycophenolate mofetil, tacrolimus, L-thyroxine, losartan, and spironolactone.¹ The patient was diagnosed with acute, inflammatory demyelinating polyneuropathy (AIDP), treated with intravenous immunoglobulins (IVIG) and steroids, and made a partial recovery.¹ The study is attractive but raises concerns that should be discussed.

Diagnosing Guillain-Barre syndrome (GBS) according to the Brighton criteria requires not only a clinical exam, nerve conduction studies (NCSs) but also investigations of the cerebrospinal fluid (CSF). We should be told why the patient did not undergo CSF investigations to confirm dissociation between CSF protein and CSF cell count and to exclude differential diagnoses.

We should be told why NCSs were carried out not earlier than three weeks after onset of quadraparesis. Diagnosing GBS early is a prerequisite for a favourable outcome.² If the diagnosis is delayed the outcome is usually worse than when the treatment is started early.²

The outcome of GBS patients also depends on the type of treatment applied. Patients receiving steroids usually have a worse outcome as compared those receiving intravenous

immunoglobulins (IVIGs) plasma exchange (PE).³ We should be told why the index patient received steroids in addition to IVIG. The combination of both remedies does not improve the overall outcome.

We disagree that GBS is a rare complication of anti-SARS-CoV-2 vaccinations.¹ In a recent review about the neurological side effects of anti-SARS-CoV-2 vaccination more than 300 cases with anti-SARS-CoV-2 vaccination associated GBS had been reported as per the end of September 2021.⁴

One reason why the prevalence of GBS did not increase since the introduction of anti-SARS-CoV-2 vaccines is that GBS is an overarching term for a number of subtypes that might be easily missed or misdiagnosed. Particularly, if GBS manifests as mono- or poly-neuritis cranialis and without involvement of the peripheral nerves, the clinical presentation may be easily misdiagnosed without considering a subtype of GBS. If these subtypes of GBS are missed or misinterpreted, the prevalence of SARS-CoV-2 vaccination associated GBS may remain low.

We disagree with the statement in the abstract that GBS affects only peripheral nerves. There is a subtype of GBS known as Bickerstaff encephalitis, which goes along with brainstem encephalitis.⁵

It is unclear if the patient was on the immune-suppressive medication for glomerulonephritis at the time of the vaccination. If he was taking mycophenolate and tacrolimus at the time of the second BPV application, it should be discussed to which degree immunosuppression favoured the development GBS.

Abbreviations: BNV, BNT162b2 vaccine; CSF, Cerebrospinal fluid; GBS, Guillain-Barre syndrome; IVIG, Intravenous immunoglobulins; NCSs, Nerve conduction studies; PE, Plasma exchange.

Overall, the interesting study has some limitations and inconsistencies that call the results and their interpretation into question. Addressing these limitations could further strengthen and reinforce the statement of the study. Anti-SARS-CoV-2 vaccination associated GBS is not rare and should be diagnosed early not to miss the chance for early treatment which can improve the outcome of these patients.

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Conflicts of interest

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Availability of data

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Author contribution

JF: design, literature search, discussion, first draft, critical comments, final approval.

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