

Dear Prof. Ma

Thanks for your letter and the reviewers' constructive comments concerning our manuscript entitled 58497 "Severe lumbar spinal stenosis combined with Guillain-Barré syndrome: A case report and literature review". Those comments are valuable and helpful for improving our paper. We have studied comments carefully and have made correction which we hope meet your requirement. Revised portions are underlined in both the response and the revised manuscript. The point-to-point responses are as follows:

Reviewer No. 1:

This is a rare presentation of a 70-year-old presenting with lumbar stenosis who underwent surgery. He then developed GBS like symptoms 2 days after. The authors imply this was related to the surgery. The GBS appears to have overlapped with the management of lumbar stenosis. Symptoms improved after IVIG, furthermore with more therapy.

Comment 1. *Title: I don't know if this is as much a mistake as a lack of efficacy or improvement with initial treatment. Could adjust the title. Running title: capitalize Barre. Case summary: his lower extremities did not return to 5/5 for 4 weeks. This reads as if the IVIG restored his weakness immediately. Abstract conclusion is too vague. No mention of GBS or lumbar stenosis.*

Response:

We appreciate your suggestion. According to the requirements, the title should be no more than 18 words, we have adjusted it. We've corrected the running title. The case summary and abstract conclusion have been adjusted appropriate.

Comment 2. *Decent background Intro/Case report Any issues with vision? Pain worse at night? Any recent illnesses or vaccinations? Did deep tendon reflexes change when symptoms worsened? Any IgG levels before and after IVIG Uric acid umol/L, include upper limit of normal Any MRI signs of GBS? Spinal nerve root inflammation? Vital*

signs stable? Tachycardia?

Response:

The main symptoms and related examinations of the patient have been presented in case report and his history. The patient denied any illnesses recently, but he got the flu vaccination by carefully reviewing of his history. We have added this important information in our report. Deep tendon reflexes (for example triceps reflex, biceps reflex, knee and Achilles tendon reflexes) disappeared when symptoms worsened. Vital signs are stable. Uric acid is 360 $\mu\text{mol/L}$ (normal).

***Comment 3.** Put a space between medicine dosages and mg. Lower case febuxostat if not at the start of a sentence. Spaces for X-rays (Fig. 1) and MRI (Fig. 2) Capitalize Table 1 Space Fig. 1 in legend Misspelled Sagittal For Table 1, are there normal values to help the reader? Outcome Would mention which form of GBS you think this case mostly resembles. Acute inflammatory demyelinating polyneuropathy?*

Response:

We've corrected these format in the manuscript. For Table 1, the results of the EMG, we described it in detail in the statement. Combined with the results of EMG and symptoms, the form of GBS is acute inflammatory demyelinating polyneuropathy. We've added it in the part of diagnose in the paper.

***Comment 4.** Surgery would be a rare cause of GBS after surgery, including in this short time frame. <https://pubmed.ncbi.nlm.nih.gov/30143563/> Was he a poultry, swine or cattle farmer? This would put him at increased risk of *C. jejuni* that can cause GBS though rarely. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3671876/>. Conclusion This could be worded better: When a patient has a history of one disease and presents with the same or similar symptoms, we still need to diagnose the condition carefully, considering other diagnoses. Possibly: When a patient has a history of one disease that isn't responding to conventional therapy, other illnesses with similar symptoms should be considered carefully and investigated.*

Response:

By carefully reviewing the patient's history, as provided by his family and community doctor, he got the flu vaccination recently. The flu vaccination might be the etiology of his GBS, and the operation accelerated its progression. We've analyzed it in the discussion. For the conclusion, we think your opinion is better, we've adjusted it. Thanks for your comment again.

Reviewer No. 2:

***Comment.** There are already publications in the literature that GBS is misdiagnosed as lumbar stenosis and that these two conditions are frequently confused. Throughout the article, the authors repeated the patient's complaints and findings. This situation got boring. The discussion section was also a repetition of the case report. The article needs to be rewritten fluently.*

Response:

Thanks for your comment. When we prepared this case, we've reviewed relevant literature. There are a few reports about spinal surgery and GBS. We found that GBS was a postoperative spinal complication in these reports. But in our report, the patient came to the emergency this time, it was the initial symptom of GBS, because he had a history of lumbar spinal stenosis, and the MRI results were consistent with his symptoms, we made a mistake in the diagnosis.

Reviewer No. 3:

***Comment.** In the case report and literature review entitled, "Severe lumbar stenosis combined with Guillain-Barre syndrome led to a mistake in the initial diagnosis and treatment: A case report and literature review", the authors demonstrate that a case of lumbar spinal stenosis combined with Guillain-Barre syndrome. The manuscript has an excellent summary but the discussion is not enough. Guillain-Barre syndrome usually appears after some infections or vaccinations. There is no description of those infectious diseases or vaccination history.*

Response: We appreciate your suggestion. By carefully reviewing the patient's history, he got the flu vaccination recently, which might be the etiology of his GBS, and the

operation accelerated its progression. We've added it in the discussion and did the appropriate analysis.

We tried our best to improve the manuscript and made modification according to the reviewers' comments. These changes will not influence the data and the framework of the paper. We appreciate the editors' and the reviewers' work earnestly, and hope that the correction will meet the requirements. Once again, thanks very much for your comments and suggestions.

Your sincerely,

Jianxin Xie