Peer Review File

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Reviewer A

Comment 1: First, the title indicates that the immunosuppressive treatment of taste disorder in thymoma patients without MG, but in the abstract, the authors described that taste disorder in thymoma patients without MG is rare. The focus of this study is unclear, the novel treatment, the rare case, or both?

Reply 1: As the reviewer mentioned, the main focus of this study is the rarity of taste disorder in a patient without MG. We changed our title as "Taste disorder in a patient with invasive thymoma without myasthenia gravis: a rare case report" as advised (see Page 1, line 1).

Comment 2: Second, in the abstract, the authors should have an overview sentence on the treatment of taste disorder in thymoma patients with MG.

Reply 2: Taste disorder in some cases recovered along with MG treatment, such as thymothymectomy or immunosuppressive treatment. We added the sentence "Taste disorder sometimes recovered along with MG treatment, such as thymothymectomy or immunosuppressive treatment." in the abstract section, as advised (see Page 3, line 3).

Comment 3: In the case presentation part, please provide more details of the clinical presentations of the patients.

Reply 3: We are very sorry but all of our available data have already been described in the case presentation.

Comment 4: The conclusion should be made with cautions because this is only a case report and the findings from this study cannot indicate the effectiveness of immunosuppressive treatment, due to poor representativeness of the patient sample.

Reply 4: As the reviewer mentioned, we also agree that our finding is insufficient to indicate the effectiveness of immunosuppressive treatment, since it is just one case. So, we changed our sentence from "showed the potency" to "suggested the potency" (See Page 3, line 17 and and Page9, line 6) and from "successfully treated with cyclosporine" to "recovered after immunosuppressive treatment" (See Page 9, line 6), as advised.

Comment 5: Third, in the part of introduction, the authors need to have some comments on the underlying pathology of taste disorder and treatment agents for this disorder in patents thymoma with MG.

Reply 5: We added sentences "Taste disorders might be induced by undetermined

antibodies associated with thymoma and targeted on taste buds, as for MG. Taste disorder sometimes recovered along with MG treatment, such as thymothymectomy or immunosuppressive treatment." as advised (Page 5, line3).

Comment 6: A further question needs to be clarified is the clinical significance of this research topic.

Reply 6: It is meaningful to treat taste disorder itself because taste disorders disturb the quality of life of patient. We added this sentence (See Page 9, line 10).

Comment 7: Fourth, in the case presentation part, the authors may provide detailed clinical complaints of the patient.

Reply 7: We are very sorry but all of the available data have already been described in the case presentation. We have no additional data about clinical complaints.

Comment 8: Finally, in the discussion part, the authors need to explain why cyclosporine is effective in detail. The authors need to tone down their sentence on the treatment effectiveness.

Reply 8: Chabwine et al. reported a case of taste disorder in a patient with thymoma-associated MG, which was treated with immunosuppressive drug and thymothymectomy. Their results suggested the coexistence of an autoantibody selectively targeting GPCRS and that immunosuppressive drug could inhibit the autoantibody. We added a sentence in the discussion section, as advised (see Page 8, line 16). We also toned down and rewrote our sentence as "recovered after immunosuppressive treatment" (See Page 9, line 6) as advised.

Comment 9: Further, please have some suggestions on problems to be further studied and what has been unknown, based this case report.

Reply 9: Pharmacological mechanism of immunosuppressive drug for the treatment of taste disorder is currently unknown and needs to be clarified. We added a sentence in the discussion section, as advised (see Page 9, line 15).

Reviewer B

It's a very interesting case, I have only minor comments:

Comment 1: Given that 20% of patients with MG have no circulating antibodies against AChR but rather present antibodies against muscle specific tyrosine kinase (MuSK) and Up to 50% of patients with AChR and MuSK negative antibodies present

anti-low-density lipoprotein receptorrelated protein 4 (Lrp4) antibodies: did you checked only antibodies against AChR?

Reply 1: As you mentioned, it is really interesting whether this patients have other antibodies. We are very sorry but we did not check for other antibodies.

Comment 2: Did you went further for resection or did the patients received neoadjuvant treatment?

Reply 2: We have not performed further resection because we have not observed any relapse. Also, this patient did not receive neoadjuvant and adjuvant treatment.