

Reviewer #1:

1. The authors can consider stating why the patient reported after 5 days despite developing severe symptoms.

Answer: Thank you for your precious opinions. Since the onset of the illness, the patient was hospitalized at a local hospital with developing severe symptoms. Until 5 days later, the patient was transferred to our hospital for treatment. We accept your advice and add some sentences in the part of *History of present illness* in our article to explain this problem.

2. The authors can also consider mentioning the dose of methylprednisolone instead "medium dosage of methylprednisolone" in the abstract as well as the treatment.

Answer: We accept the reviewers' advice and add the dose of methylprednisolone in both the abstract and the treatment and show it in our Table 1.

3. Based on previous literature available, the authors can also consider stating the incidence of common ant sting, demographically describe groups which are more susceptible and the percentage of ant-stings which develop anaphylaxis.

Answer: Thank you for your good opinions. We add the associated data in the first paragraph of *DISCUSSION* part.

4. The topic mentions an "an inebriated male". However, it is not described in any of the case presentation or discussion. As this condition makes the case report unique as compared to other reported cases of ant-sting anaphylaxis, the authors can consider adding more details.

Answer: Thank you for your good advice. We accept your advice and make a description and explanation to the patient's inebriated state in the *History of present illness* part and the fourth paragraph of *DISCUSSION* part.

Reviewer #2:

1. Acid and alkaloids cause toxic reactions, causing a sterile pustule at the sting site, while allergic reactions are due to the protein components of at venom, such as phospholipase or protein like vespid antigen 5. There is no evidence that the reaction Authors observed in their patient was allergic, while it seems toxic reaction.

Answer: Thank you for your good opinion. It's reported that ant venom includes various biologically active peptides and protein components, which tend to cause allergic reactions (*Potiwat R. Ant Allergens and Hypersensitivity Reactions in Response to Ant Stings. Asian Pac J Allergy Immunol 2015;33(4):267-275.*). Ant venom can cause immediate reactions occurring within 1 to 4 h and delayed reactions occurring after more than 4 h. Immediate reactions can be further divided into small local reactions (pain, swelling, erythema, heat, and sterile pustules at sting sites) (*Potiwat R. Ant Allergens and Hypersensitivity Reactions in Response to Ant Stings. Asian Pac J Allergy Immunol 2015;33(4):267-275.*). We agree with your opinion that toxic reaction plays a role in the formation of pustule, but allergic reactions also play a role in the formation of pustule, because an infiltration of eosinophils is seen in dermis, and subsequent systemic anaphylaxis occurred. Of course, to make sure the protein components of venom, such as phospholipase or protein like vespid

antigen 5, is crucial, however, it needs good experimental conditions. Thank your good opinion again, we make an explanation to this question in the third paragraph of **DISCUSSION** part, and the basic knowledge of ants, ant venom, and ant sting allergy should be enhanced the same for our team.

2. No specific IgE for ant venom allergens have been measured (total IgE is not a proof of allergic reaction!)

Answer: Thanks for your advice. The test of allergen-specific IgE were not implemented due to patient's refuse to be sent out for examination. We add this explanation in the second paragraph of **DISCUSSION** part.

3. Authors state that the main histopathological changes observed in ant venom allergy are eosinophil recruitment, but the biopsy they show is characterized by a pustule with infiltration of neutrophils in stratum spinosum.

Answer: Thank you for your useful advice. We make some modification to our figure (**Figure 3A** and **B**) to show the eosinophil recruitment, and give a correct citation to Figure 3.

(1) Science editor:

1. The case description is not very detailed. The author should describe the treatment process in detail.

Answer: We accept your advice and give more detailed description (the *History of present illness* part) to the case and the treatment, and add a table (**Table 1**) to describe the treatment.

2. In addition, the clinical experimental indicators of the disease are very important, and drawing a table will be more intuitive.

Answer: Thank you for your great suggestion. We add a table to show the basic characters, symptoms and signs, test results and treatments (as shown in **Table 1**).

(2) Company editor-in-chief:

1. Before final acceptance, uniform presentation should be used for figures showing the same or similar contents; for example, “Figure 1 Pathological changes of atrophic gastritis after treatment. A: ...; B: ...; C: ...; D: ...; E: ...; F: ...; G: ...”. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor.

Answer: Thank you for your advice. We provide the original figures in our PowerPoint (75092-Figures.pptx) in the uniform presentation.

2. In order to respect and protect the author's intellectual property rights and prevent others from misappropriating figures without the author's authorization or abusing figures without indicating the source, we will indicate the author's copyright for figures originally generated by the author, and if the author has used a figure published elsewhere or that is copyrighted,

the author needs to be authorized by the previous publisher or the copyright holder and/or indicate the reference source and copyrights. Please check and confirm whether the figures are original (i.e. generated de novo by the author(s) for this paper). If the picture is ‘original’, the author needs to add the following copyright information to the bottom right-hand side of the picture in PowerPoint (PPT): Copyright ©The Author(s) 2022.

Answer: Thank you for your precious opinions. We confirm the figures are original and add **Copyright ©The Author(s) 2022** to the bottom right-hand side of the picture in PowerPoint (PPT).