

Dear Editor,

We have studied the valuable comments from the reviewers carefully, and tried our best to revise the manuscript. The point to point response to reviewers' comments are listed as follow.

Reviewer 1

Comment 1: The case is interesting and figures are impressive but I find it lacking of several points: first it is not novel since pyoderma gangrenosum as first manifestation of inflammatory bowel disease is well known <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4225318/> Indeed, the lack of recognition of this disease in the context of diarrhea could be a bit surprising for some clinicians. In this sense, authors should further explain how diarrhea was managed and why the diagnosis of IBD was delayed

Response: Thank you for your careful work. (1) As you mentioned, pyoderma gangrenosum is not so rare in patients with inflammatory bowel disease. The challenge of diagnosis in this patient lied in the site of pyoderma gangrenosum happened exactly at preauricular sinus. Compared to pyoderma gangrenosum, infection of preauricular sinus is much more common. We have added your reference to our manuscript. (2) Besides, her history of Crohn's disease was not evident. The symptom of diarrhea and infection of *Clostridium difficile* made the diagnosis of IBD difficult at acute stage. Final diagnosis of Crohn's disease was made upon the evolution under colonoscopy and result of biopsy. We have added the result of colonoscopy highlighted in the manuscript. (3) We have added highlighted information concerning the management of diarrhea in the manuscript.

Comment 2: Follow-up of the patient, if available, would be interesting

Response: We are still following this patient. Up till now, there is no sign of relapse. Generally, in patients with preauricular sinus, we often suggest radial resection of the sinus to prevent recurrent infection. But we are strongly against invasive operation on patients like this.

Comment 3: Several mistakes should be corrected: Figure 3.biopsy specimen should be "Figure 3. Biopsy" Figure 2. axial should be Figure 2. Axial *C. difficile* should be *C. difficile*

Response: Thank you very much for pointing out the typing issues in our manuscript. We have corrected the spelling errors in the manuscript.

Reviewer 2

Comment: Congratulations, it's a good report.

Response: Thank you sincerely for your appreciation.

Best regards
Zhi-qiang Gao