

Dear Editor and Reviewers:

Thank you for your constructive comments on our manuscript(88876). These comments are all valuable and very helpful for revising and improving our paper. We have studied comments carefully and made corrections accordingly that we hope the quality of our manuscript has been improved for acceptance. These modified sections have been highlighted in yellow in the revised manuscript. Point-to-point responses to the Editor Comments and the reviewers' comments are followed:

Reviewer #1:

1、 The authors could focus/resume published data on perianal Sweet syndrome (and disease associations, tumors/other) in the Introduction. The relevance (possible interference of leukemia with post-surgical evolution) could be presented in detail in the Discussion.

**Response:** Thank you for your valuable suggestion. We searched and cited the relevant literature again, and introduced it in the two parts of Introduction and Discussion.

Changes to the manuscript are in Page 2-3, Lines 54-63; Page 6-7, Lines 181-184.

2、 The authors could also report in detail skin lesions reported in the context of chronic myelomonocytic leukemia (and note the references' numbers).

**Response:** Thank you for your valuable suggestion. We have supplemented this aspect accordingly in the article.

Changes to the manuscript are in Page 7, Lines 193-198.

3、 The aims of the report could be noted at the end of the Introduction; case-related data should be presented in detail in the Case presentation section (and discussed in the Discussion section).

**Response:** We have added the purpose of the case here in the Introduction; And the corresponding supplement is made in the case presentation section and the discussion section.

Changes to the manuscript are in Page 3, Lines 63; Page 6-7, Lines 163-183.

4、 The authors could note also in the Abstract that the patient had had hemorrhoid-surgery. Which was the clinical context for the hemorrhoids?

**Response:** We have made corresponding additions in the Abstract and case presentation.

Changes to the manuscript are in Page 1, Lines 25; Page 2, Lines 67-69.

5、 With regard to the case data, the size of the perianal lesions could be noted at each stage (and for each evaluation: clinical, on imaging procedures). The imaging procedures' images could be presented in detail, in particular the CT-scan.

**Response:**We sincerely apologize for not collecting comprehensive imaging data of the local lesions during the initial treatment. This, coupled with the patient's limited financial resources, hindered our ability to perform CT scans at different stages of the lesions. Furthermore, we have re-uploaded clearer images.

6、 Examples of words/phrases to revise "have not been previously reported" can be reformulated " / reported as based on data available on Pubmed, textbooks (references' numbers), internet/other databases" similar "to our department" can be reformulated "the the department where the authors work/are employed" similar "operations" can be reformulated "surgical procedure" "anti-infective treatment" can be reformulated "remained uncontrolled" can be reformulated "may exacerbate the condition" can be reformulated to more precise, oedema increased? "he was" can be reformulated to more polite "the patient was"

similar "failed to heal adequately" can be reformulated, the authors could note what meant by adequately, and the time when evaluated (at NN days after the perianal-abcess procedure).

**Response:** Thank you very much for your revision suggestions. We have carefully reviewed and revised the article item by item.

7、 Laboratory examinations: the normal ranges could be added.

"inflammatory hyperplasia" can be reformulated, hyperplasia of the anal epithelium?

**Response:** Thank you very much for your revision suggestions. We have added the normal ranges for laboratory examinations. Additionally, we have made corrections to the English expression in the pathology report.

Changes to the manuscript are in Page 4, Lines 108-116; Page 5, Lines 125-126.

Reviewer #2:

1、 What was pathohistological diagnosis of excised hemorrhoids.

**Response:** During the patient's hospitalization, we communicated with the surgeon who performed the initial operation through the patient's family. However, due to limitations in the hospital conditions, a pathological

biopsy was not obtained at that time. The biopsy report from the second perianal abscess operation has been included in the subsequent discussion.

Changes to the manuscript are in Page 6, Lines 165-166.

2、 Figure 1 does not have anoscopy view.

**Response:**We deeply apologize for the lack of comprehensive intraoperative data. Figure 1 now accurately depicts the perianal appearance of the patient. We have made adjustments to the placement of Figure 1.

Changes to the manuscript are in Page 4, Lines 92-93.

3、 What is intercostal thinckness? Which measure is 6.4cm. please rephrase this segment, it is not clear.

**Response:**Thank you for bringing the issue to our attention. We have rephrased this paragraph in the text accordingly.

Changes to the manuscript are in Page 5, Lines 122-123.

4、 Is ‘ ‘ flaky’ ’ pathologica term? I have never heard of it. What was the indication for bone marrow biopsy?。

**Response:** Thank you very much for bringing the issue to our attention.

We have made the necessary corrections to the English expression in the pathology report. Following the patient's admission, the abnormal blood routine examination prompted us to seek a consultation with hematologists, suspecting a blood system disorder. It was decided to perform a bone marrow aspiration to further clarify the diagnosis.

5、 Shorten this segment. Only current classification is important.

**Response:** Thank you very much for pointing out the problem, we have Shorten this segment.

Changes to the manuscript are in Page 7, Lines 184-187.

6、 Unfortunately I do not see any proof that this was perianal SS. SS is a systemic skin infiltration with macroscopic changes on predilection sites. This case looks like classic complication of local surgical treatment due to hematologic disease. So please change the whole case and the title.

**Response:** Thank you very much for pointing out the problem. During the treatment of this patient, we also considered whether there were complications after local surgical treatment for his blood disease. After consulting with hematologists, dermatologists, and other doctors, we leaned towards a diagnosis of perianal necrotizing Sweet's syndrome. We

have included a discussion of the patient's condition in the revised article and updated the title accordingly.

Changes to the manuscript are in Page 6-7, Lines 163-183.

7、 I do not agree completely with this statement. Perianal necrotizing fasciitis, called Fournier's gangrene has its risk factors. Please consult an excellent article <https://pubmed.ncbi.nlm.nih.gov/26290629/>

**Response:** Thank you very much for your guidance. We have carefully reviewed the relevant articles and made further revisions to the discussion of pertinent sections.

Changes to the manuscript are in Page 8, Lines 222-229.

8、 The authors write ‘ ‘ in contrast’ ’ and then also state treated with debridement. Maybe there is a grammar error so they wanted to state ‘ ‘ if NSS was treated with debridement’ .. If so, I also disagree. Necrotizing infection, despite the cause means that the tissue is dead and should be removed. Other therapies should be directed to its cause.

**Response:** Thank you very much for your guidance. We have reviewed and cited part of the relevant literature and revised the treatment

differences between necrotizing fasciitis and necrotizing Sweet's syndrome in the article.

Changes to the manuscript are in Page 8, Lines 224-229.

9、 Why are these figures so blurry. Today mobile phones produce better pictures. The same goes for CT which is also blurry。

**Response:**We sincerely apologize for the inconvenience caused by technical issues that resulted in the compression of our inserted picture in the article. To prevent further compression, we have re-uploaded the image.

**Reviewer #3:**

This is a very interesting and educating paper reporting on misdiagnosis of perianal necrotizing sweet syndrome as perianal necrotizing fasciitis in a patient with chronic myelomonocytic leukemia. The authors should be congratulated for the tremendous effort they spent and the manuscript can be published in the current form.

**Response:**Thank you very much.



