Dear editors and dear reviewers

Re: Manuscript ID: 86057 and Title: Postpolypectomy syndrome without abdominal pain led to sepsis/septic shock and gastrointestinal bleeding: a case report

Thank you for your letter and the reviewers 'comments concerning our manuscript entitled "Postpolypectomy syndrome without abdominal pain led to sepsis/septic shock and gastrointestinal bleeding: a case report" (86057). Those comments are valuable and very helpful. We have read through the comments carefully and have made corrections. Based on the instructions provided in your letter, we upload the file of the revised manuscript. Revisions in the manuscript are shown using highlights for additions. The responses to the editors' and reviewers' comments are marked in red and presented following.

We would love to thank you for allowing us to resubmit a revised copy of the manuscript and we highly appreciate your time and consideration.

Sincerely.

Yanyan Zhou.

Reviewer #1:

Scientific Quality: Grade B (Very good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Accept (General priority)

Specific Comments to Authors: This is an interesting case of PPS without abdominal pain. The case is well presented and limitation of unable to perform CT immediately after the episode is acknowledged.

Response: We are very grateful for your valuable comments and recognition of our work. We revised the whole manuscript carefully to avoid language errors. In addition, we consulted a professional editing service again, and provide a new language certificate along with the manuscript. We believe that the language is now acceptable for the review process.

Reviewer #2:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Major revision

Specific Comments to Authors:

Comment 1: In this case, the patient developed a fever and decreased blood pressure during polypectomy. Procalcitonin and culture results do not support sepsis, and there is very little evidence to support the diagnosis of sepsis/septic shock. Pulmonary thromboembolism, air embolisms, and fat embolisms are among the differential diseases. Please explain the basis for the diagnosis of sepsis/septic shock. Abstract No changes Introduction Please describe the terminology and definitions of sepsis and septic shock. Case summary Describe the reference values of blood gas analysis results. Please state the reference values for the results of various blood samples. You state that the diagnosis of sepsis was made based on Sepsis-3 diagnostic criteria.

Response 1: In 2016, the Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3) defined sepsis as a life-threatening organ dysfunction caused by a dysregulated host response to infection. This organ dysfunction can be identified as an acute change in the total SOFA score of 2 after infection. Septic shock is classified as a subtype of sepsis, defined as the need for a vasopressor to maintain MAP ≥65 mmHg despite adequate volume resuscitation, with serum lactate levels >2 mmol/L (18 mg/dL). We have added the above definition in the Introduction section as "Sepsis is a life-threatening organ dysfunction syndrome because of …… Septic shock is classified as ……levels >2 mmol/L (18 mg/dL)." in **INTRODUCTION** section.

The definition of Sepsis 3.0 points out that "Organ dysfunction can be identified as an acute change in total SOFA score 2 points consequent to the infection. The baseline SOFA score can be assumed to be zero in patients not

known to have preexisting organ dysfunction."

Table 1. Sequential [Sepsis-Related] Organ Failure Assessment Score[a]

	Score				
System	0	1	2	3	4
Respiration					
Pao_2/Fio_2, mm Hg (kPa)	≥400 (53.3)	<400 (53.3)	<300 (40)	<200 (26.7) with respiratory support	<100 (13.3) with respiratory support
Coagulation					
Platelets, $\times 10^3/\mu L$	≥150	<150	<100	<50	<20
Liver					
Bilirubin, mg/dL (μmol/L)	<1.2 (20)	1.2-1.9 (20-32)	2.0-5.9 (33-101)	6.0-11.9 (102-204)	>12.0 (204)
Cardiovascular	MAP ≥70 mm Hg	MAP <70 mm Hg	Dopamine <5 or dobutamine (any dose)[b]	Dopamine 5.1-15 or epinephrine ≤0.1 or norepinephrine ≤0.1[b]	Dopamine >15 or epinephrine >0.1 or norepinephrine >0.1[b]
Central nervous system					
Glasgow Coma Scale score[c]	15	13-14	10-12	6-9	<6
Renal					
Creatinine, mg/dL (μmol/L)	<1.2 (110)	1.2-1.9 (110-170)	2.0-3.4 (171-299)	3.5-4.9 (300-440)	>5.0 (440)
Urine output, mL/d				<500	<200

Abbreviations: Fio_2, fraction of inspired oxygen; MAP, mean arterial pressure; Pao_2, partial pressure of oxygen.

[a] Adapted from Vincent et al.[27]

[b] Catecholamine doses are given as μg/kg/min for at least 1 hour.

[c] Glasgow Coma Scale scores range from 3-15; higher score indicates better neurological function.

We supplemented the patient's MAP and FiO2 as well as PaO2/FiO2 in the manuscript to facilitate SOFA scoring, as "his BP decreased to 79/44 mmHg (MAP 55.67mmHg)," "with a BP of 70/45 mmHg (MAP 53.33mmHg) and HR of 122 beats/min and was transferred to the ICU at 17:44." in ***History of present illness*** section; as "and gave high-flow oxygen for respiratory support (FiO2 100%, flow 50L/min)", "November 23, 2021 (day 9): we gave high-flow oxygen for respiratory support (FiO_2 80%, flow 50L/min). ", Even with adequate fluid resuscitation, vasoactive drugs are still required to maintain MAP > 65 mmHg." in **TREATMENT** section; as "The PaO2/FiO2 was 221mmHg.", "PaO2/FiO2 was 186 mmHg." in ***Laboratory examinations*** section;

The SOFA score of the patient was 4 points when the disease changed for the first time, and 5 points when the disease changed for the second time, and the biomarkers of infection increased significantly. It is considered that infection may be associated with endoscopic colonic surgery. In the second case of sepsis, vasoactive drugs are still required to maintain blood pressure after adequate fluid resuscitation. It meets the diagnostic criteria of Sepsis-3 We have revised the above scoring details and diagnostic basis in the manuscript,

as "November 17, 2021 (day 3): according to the Sepsis-3 definition, organ dysfunction can be identified as an acute change in total sequential organ failure assessment (SOFA) score 2 points ……November 23, 2021 (day 9): the SOFA score was 5 (Respiration 3, Cardiovascular 2), and elevated PCT and IL-6 indicated infection. It is considered that infection may be associated with endoscopic colonic surgery……Blood culture results released on 29 November (samples sent on 23 November) indicated Moraxella osloensis. Based on previous similar cases, we concluded that this patient was consistent with the diagnosis of PSS and had sepsis and septic shock." in **FINAL DIAGNOSIS** section.

We added the normal range of values when all the test results first appeared, have revised in the manuscript as "November 17, 2021 (day 3): blood gas analysis showed pH 7.33 (normal range, 7.35–7.45), partial pressure of carbon dioxide ($PaCO_2$) 37 mmHg (normal range, 35–45mmHg), partial pressure of oxygen (PaO_2) 211 mmHg((normal range, 60–100mmHg), lactate levels 4.8 mmol/L (normal range, 0.5–1.6 mmol/L), bicarbonate radical concentration 19.5 mmol/L(normal range, 22–26 mmol/L), base excess (BE) 5.8 mmol/L (normal range, -3–3mmol/L), and potassium ion concentration 2.9 mmol/L (normal range, 3.5–5.0mmol/L). The PaO_2/FiO_2 was 221 mmHg (normal range, > 300 mmHg). Blood routine results showed a white blood cell (WBC) count 3.29×10^9/L (normal range, 3.50×10^9–9.50×10^9/L), neutrophil percentage 87.8% (normal range, 40%–75%), and platelet count 142×10^{12}/L (normal range, 125×10^{12}–350×10^{12}/L). …… and antithrombin (AT) III level 69% normal range, 75%–125%)." in ***Laboratory examinations*** section.

Comment 2: Please provide the results of blood culture, urine culture, etc. and the final peak value of procalcitonin. Please provide the basis for your diagnosis of infection, not just cytokine release.

Response 2: Since the patient had no evidence of urinary tract infection, we did not perform a urine culture. The final peak value of procalcitonin was 1.66

ng/mL (normal range, 0–0.05 ng/mL). Blood culture (double tube and double set) was performed during twice disease changes. The result of the first culture was negative, and we have already mentioned the results of this blood culture as" Blood culture was negative. We found no significant differences in the other laboratory results." in ***Laboratory examinations*** section. The result of the second culture had a positive result, indicating Moraxella osloensis. We are very sorry for forgetting to include the results of the second blood culture in the manuscript and have revised the manuscript as "Blood culture results released on 29 November (samples sent on 23 November) indicated *M. osloensis*. Based on previous similar cases, we concluded that this patient was consistent with the diagnosis of PSS and had sepsis and septic shock." in **FINAL DIAGNOSIS** section.

Comment 3: Has a contrast CT of the chest been performed? Pulmonary thromboembolism, air embolisms, fat embolisms, etc. are differentials.

Response 3: Thank you for your constructive comments. We really should consider the possibility of these diseases. I am sorry that due to the rapid improvement of his respiratory failure symptoms, he was quickly withdrawn from high-flow oxygen inhalation, mainly manifested as hemodynamic instability and coagulation dysfunction, and no enhanced CT examination of the lung was performed. We will learn from this and will try our best to improve these checks if we encounter similar cases in the future.

Comment 4: Discussion Define PPS. Why do you say sepsis when there is no bacteriological evidence of sepsis? Please provide rationale.

Response 4: Based on the definition of sepsis 3, the diagnosis of sepsis does not necessarily require a positive bacteriological result, which may be due to the limited positive rate of culture results. This patient had an elevated PCT, fever, and neutrophil percentage. We still think he meets the criteria for sepsis.

Blood culture results released on 29 November (samples sent on 23 November) indicated Moraxella osloensis. This bacterium is a normal flora of human and animal mucous membranes and can cause opportunistic infections in immunodeficient adults and non-immunodeficient children. The patient had a history of oral cancer. This infection may be due to intestinal wall injury caused by colonoscopic polypectomy and local infection leading to sepsis, with fever, a significant increase in inflammatory indicators and coagulation dysfunction, which is consistent with the diagnosis of PPS. We have revised in the manuscript, as" Blood culture results released on November 29 (samples sent on November 23) indicated *M.* osloensis. At the time of submitting the blood culture sample, the patient was suffering from a second bout of sepsis and developed septic shock. …… In summary, the patient's symptoms and laboratory results were in line with the diagnosis of local injury and infection of the intestinal wall after colonoscopic polypectomy, leading to bacterial entry into the blood and sepsis, followed by an inflammatory storm, coagulation damage and shock. This was a particularly serious and life-threatening case of PPS." in **DISCUSSION** section.

EDITORIAL OFFICE'S COMMENTS

(1) Science editor:

The manuscript has been peer-reviewed, and it's ready for the first decision.

Language Quality: Grade B (Minor language polishing)

Scientific Quality: Grade B (Very good)

(2) Company editor-in-chief:

I recommend the manuscript to be published in the World Journal of Clinical Cases. Before final acceptance, when revising the manuscript, the author must supplement and improve the highlights of the latest cutting-edge research results, thereby further improving the content of the manuscript. To this end, authors are advised to apply a new tool, the Reference Citation Analysis (RCA). RCA is an artificial intelligence technology-based open

multidisciplinary citation analysis database. In it, upon obtaining search results from the keywords entered by the author, "Impact Index Per Article" under "Ranked by" should be selected to find the latest highlight articles, which can then be used to further improve an article under preparation/peer-review/revision. Please visit our RCA database for more information at: https://www.referencecitationanalysis.com/.

Response: Thank you for your recognition and recommendation. We subscribed to Reference Citation Analysis (RCA) and used this new tool for literature search. While revising the manuscript, several new references were added (References 15-18), which made our manuscript more complete and cutting-edge.