Peer Review File

Article information: http://dx.doi.org/10.21037/apm-20-558

<mark>Reviewer A</mark>

1. This is a paper entitled normal lymphocyte morphology observed in peripheral. blood smears of patients with CVID-19.

this paper evaluates 23 patients with COVID 19 including 18 "mild," 3 severe and 2 critical. Siple automated blood count and morphology evaluation by clinical technicians is provided

1. At what point in time during the course of presentation and clinical illness were these blood samples obtained

Reply 1: Thank you for your valuable suggestions. A total of 23 most recently hospitalized COVID-19 patients from 25-February to 01-March were enrolled in this pilot study. These blood samples were obtained on the admission days of each patient.

Changes in the text: P2 L16-L17

2. Additional characteristics of the patient population including co-morbidities, concomitant medications at time of PB smear would provide additional important contextual information.

Reply 2: Additional characteristics of the patient population, including co-morbidities, concomitant medications at the time of PB smear, were provided in revised Table 1. **Changes in the text:** Page 7, revised Table 1

3. while lymphocyte morphology may be of interest, additional details concerning lymphocyte populations by flow cytometric analysis and of other hematopoeitc elements would better address and add to our understanding of the hematologic characteristics of this condition.

Reply 3: Thank you for this constructive suggestion. Additional details concerning lymphocyte subpopulation by flow cytometric analysis were also added in the revised Table 1. **Changes in the text:** P7, revised Table 1.

<mark>Reviewer B</mark>

This paper described lymphocyte morphology of a group of COVID-19 patients. While lymphocyte morphology is an important topic in COVID-19, it has been reported by several groups already. Therefore, the current study is not novel. More important, the authors failed to cite these published studies. Based on these published studies, the most common and unique lymphocyte morphology in patients with COVID-19 is atypical lymphocytes, especially plasmacytoid lymphocytes. The authors need to significantly revise their manuscript and carefully review their slides to see if they have the same discovery.

Major comments:

1. The authors need to cite the published lymphocyte morphologic studies. These include Gerard et al, Br J Haematology 2020; Weinberg et al, Br J Haematolo 2020; Foldes et al, Am J Hematology, 2020.

Reply 1: Thank you for this valuable suggestion. In fact, we submitted this brief report on 5-March-2020. It is out of our expectations that the *Under Review* process lasted for almost four months. At the time of our submission, no such articles were available or little attention was paid to the morphological changes of peripheral white blood cell. However, we totally agreed with the reviewer that three articles mentioned were of great importance in revising our manuscript. Hence, we added related contents in the revised manuscript and cited them accordingly. **Changes in the text:** P3, L25-L32.

2. The authors need to revisit their slides to determine whether plasmacytoid lymphocytes are present in their cohort.

Reply 2: Profound thanks for this constructive suggestion. Most of the atypical lymphocytes observed in our cohort were just irregular shaped lymphocytes with excessive cytoplasm but normal nucleus. Plasmacytoid lymphocytes were also observed but with a low percentage. We revised Figure 1 by adding two more pictures, however, pictures of representative forms of plasmacytoid lymphocytes were not taken during the time of our research. This research was performed at the beginning of March, and all our slides or smears were disposed as medical waste according to regulations of our hospital. Hence, it was a pity that representative forms of plasmacytoid lymphocytes cannot be retaken.

Changes in the text: P3, L30-L32.