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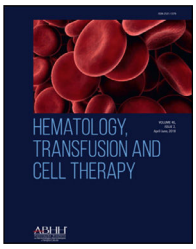

Letter to the Editor

Regarding management of COVID-19 in acute lymphoblastic leukemia

Dear editor,

I read with interest the recent article by Butt et al. regarding the management of severe SARS-CoV-2 infection in a young male with T cell acute lymphoblastic leukemia.[1] In the article, the authors discuss a case of COVID-19 presenting as febrile neutropenia following induction chemotherapy where the patient, after recovering from the acute infection, unfortunately developed cerebral venous thrombosis, and eventually expired from complications that followed.

Although this was a complicated case, specific details regarding the management are lacking. Firstly, the authors mention that the patient was started on 'broad spectrum antibiotics and voriconazole for febrile neutropenia' but do not discuss specific management for the SARS-CoV2 infection. It is globally recognized that treatment with dexamethasone is warranted for patients that develop hypoxia from the disease.[2] Antiviral agents like remdesivir in combination with steroids also improve survival outcomes and have no contraindication for cancer patients if they have adequate hepatic and liver function.[3] Whether this patient presented before the benefits of these medications in COVID-19 were ascertained, or they were not administered due to some other contraindication needs to be clarified. Secondly, it remains unclear whether the acute hypoxic respiratory failure was secondary to a superimposed bacterial or fungal infection or simply because of COVID-19 itself. Although, an elevated procalcitonin (PCT) level is mentioned, this does not prove a bacterial infection as PCT levels in patients with hematologic malignancies is controversial and clinicians generally recommend a higher cutoff value of positivity compared to the general population.[4] In the absence of superimposed infection, the authors mention weighing the benefits of administering granulocyte-colony stimulating factor (G-CSF) against the potential risk of exacerbating the pulmonary complication from COVID-19. Therefore, the decision to opt in favor of using G-CSF should be discussed. Thirdly, the authors have not addressed whether the patient received thromboprophylaxis during this hospital stay. Although the patient was neutropenic and thrombocytopenic on admission requiring platelet transfusions, whether the patient's platelet count improved after treatment of acute sepsis is unclear. If the patient was not bleeding and had a stable platelet count above 50,000/uL, he should have been on systemic thromboprophylaxis or sequential compression devices at the very least, as the risk of venous and arterial clots in COVID-19 is well established.[5] If the patient was not a candidate for anticoagulation, this should have been mentioned as these are essential aspects of managing severe disease, particularly in cancer patients.

Conflicts of interest

The author declares no conflicts of interest.

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