THE AMERICAN JOURNAL of MEDICINE®

COVID-19 and Light Chain Amyloidosis: Correspondence

To the Editor:

We would like to discuss the article "COVID-19 and Light Chain Amyloidosis (AL), Adding Insult to Injury,"[1] published in a recent issue of ***The American Journal of Medicine***. Crees and Stockerl-Goldstein mentioned that "... overlap creates unique challenges in caring for patients with AL which are further compounded by the immunosuppressive nature of anti-plasma cell therapies, the need for frequent clinical assessments and the exclusion of AL patients from initial COVID-19 vaccine trials..."[1] We agree that managing COVID-19 and administering COVID-19 immunization to patients with underlying disease can be difficult. The immunodeficiency aspect of AL, as well as the need to use immunosuppressive drugs, is frequently a problem in COVID and vaccine management. A fundamental concern is if there is a danger associated with management or vaccination.

Treatment is essential if there is an infection, regardless of whether or not the patient has previously used immunomodulatory drugs. Similarly, during a pandemic, everybody must practice illness prevention. The clinical issue is usually about the drug/vaccine's efficacy and safety. Because of the compromised immune nature of the AL disease, reduced medication and vaccination efficacy is likely. If there is excellent pre-vaccine planning and post-vaccination monitoring, vaccination should be no difficulty. The quick increase in blood viscosity following immunization, similar to that of a cancer patient on chemotherapy, may pose a safety risk.[2] Because the AL patient may have a background high blood viscosity,[3] and increased blood viscosity is a biological process after COVID-19 vaccination[4] or COVID-19 infection,[5] monitoring the AL patient's background thrombohemostatic status during therapy or immunization may be necessary.

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https://doi.org/10.1016/j.amjmed.2022.02.004

References

1. Crees ZD, Stockerl-Goldstein K. COVID-19 and light chain amyloidosis, adding insult to injury [Online ahead of print]. *Am J Med* 2022 Jan 23. https://doi.org/10.1016/j.amjmed.2022.01.005.
2. Mungmungpuntipantip R, Wiwanitkit V. COVID-19 vaccination in oncology patients receiving chemotherapy. *Clin Oncol (R Coll Radiol)* 2021;33(10):e467.
3. Isobe T, Takatsuki K, Tishendorf FW, Birken S, Osserman EF. Plasma cell myeloma, hyperviscosity and amyloidosis associated with a serum IgG3 lambda and urinary excretion of two fragments related to the variable portion of lambda light chains. *Clin Immunol Immunopathol* 1981;19(1):55–66.
4. Joob B, Wiwanitkit V. Expected viscosity after COVID-19 vaccination, hyperviscosity and previous COVID-19. *Clin Appl Thromb Hemost* 2021;27:10760296211020833.
5. Joob B, Wiwanitkit V. Blood viscosity of COVID-19 patient: a preliminary report. *Am J Blood Res* 2021;11(1):93–5.

Funding: None.
Conflicts of Interest: None.
Authorship: Both authors contributed equally – Substantial contributions to study conception and design, acquisition of data, analysis and interpretation of data; Drafting the article or revising it critically for important intellectual content; and Final approval of the version of the article to be published.

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