Commentary: COVID-19-associated mucormycosis: The ongoing battle

Vare *et al*. in their manuscript reported the incidence, cumulative mortality, and factors affecting the outcome of COVID-19-associated mucormycosis (CAM) from western India. The reported incidence of CAM in this report, that is, 13.6 cases per 1000 cases of moderate-severe COVID-19 infection, is a debatable figure as the paper does not specify if the 67 CAM patients belonged to the same pool of the 4910 COVID-19 patients treated at the same hospital.

In this series, the minimum follow-up period was 1 month, and the mean follow-up period was 35 ± 2.7 days. This follow-up period is not long enough to draw reliable conclusions, and monitoring is needed over longer periods of time to know the eventual outcomes. Other events such as late sequelae or disease recurrence are seen later on in the course of the disease and may be missed if the follow-up period is too short. Mortality rates, recovery rates, and other data on factors predicting outcomes cannot be ascertained from such short follow-up periods; especially when the recommended duration of medical therapy itself is at least 6 months.[1]

Transcutaneous retrobulbar amphotericin-B injection (TRAMB) has proven to be a game-changer in the treatment of orbital mucormycosis.[2,3] However, this technique was not employed by the authors in the treatment of CAM in their patients. It is possible that the rates of orbital exenteration amongst CAM patients could have been reduced if TRAMB had been instituted in suitable patients early on in the course of treatment.

This paper also reports that the cumulative probability of death or orbital exenteration was 38% at day 20 of infection. Furthermore, it mentions that those who required NIV and did not receive amphotericin-B were at a high risk of these outcomes. Requirement of non-invasive ventilation is more likely a surrogate measure of the COVID-19 severity. It is alarming to note that there were patients in this cohort who despite having a confirmed diagnosis of mucormycosis were unable to receive the drug of choice (amphotericin-B), most likely due to unavailability of the drug. One of the highlights of this paper is that it brings forth the mortality and morbidity due to CAM when amphotericin-B was not available. This is crucial data that focuses on the need for an emergency stockpile of essential drugs such as amphotericin-B—data that all stakeholders and policymakers need to bear in mind to avert a potentially avoidable catastrophe in the future.

The authors are to be commended for this work and are strongly encouraged to follow up with the patients included in this study for a longer period to obtain more meaningful data on long-term outcomes.

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