

Another challenge

The rise in mucormycosis cases underlines the need for diabetics to get vaccination

The second wave of the pandemic has thrown up another serious challenge. Besides, in just about three months, the number of daily cases touching 4.14 lakh on May 6 and cumulative cases crossing 15 million, mortality reaching an all-time peak of 4,529 on May 18 and the total number of deaths reaching nearly 1.5 lakh, there is now a growing number of mucormycosis cases being reported in COVID-19 patients. A concerned Health Ministry has now asked all States to classify mucormycosis, a fungal infection, as a notifiable disease under the Epidemic Diseases Act 1897; a few States have complied. As a notifiable disease, every suspected and confirmed case is to be reported to the State Health Department. While the infection is caused by a group of moulds called mucormycetes, which are commonly found in the environment, the fungi are largely harmless under normal circumstances. But COVID-19 patients with uncontrolled diabetes who are on steroid therapy face a higher infection risk. Breathing in the fungi spores can cause an infection in the lungs or sinuses which can spread. Even when blood sugar is under control, indiscriminate steroid use can cause an increase in blood sugar levels, making such patients more susceptible to mucormycosis infection.

Patients with severe COVID-19 disease tend to develop a systemic inflammatory response leading to lung injury and multisystem organ dysfunction. While WHO "strongly recommends" that corticosteroids such as dexamethasone be used in treating patients with severe and critical COVID-19, they should not be used in non-severe COVID-19 patients. The absence of any new or repurposed drugs to effectively treat COVID-19 patients and the lack of clear guidelines in using certain drugs have led to indiscriminate drug use, including steroids. The rise in mucormycosis infection cases should be a wake-up call for COVID-19 patients and medical practitioners to use steroids judiciously for a limited period and in the right dosage, especially in diabetic patients; self-medication with steroids should be avoided at any cost. Most importantly, in COVID-19 patients with diabetes, controlling blood sugar levels using insulin can help prevent mucormycosis infection. While the availability of Amphotericin-B to treat mucormycosis was limited till recently, five manufacturers in India are in the process of ramping up production. Five more companies have also been licensed to augment supplies. Since the infection presents itself with typical symptoms, timely diagnosis is easy. The infection can be cured without even surgery if detected early. This is one more reason why people, particularly those with diabetes, should get vaccinated soon. Since complete vaccination prevents severe disease, diabetics will not need steroids, and hence will not suffer from mucormycosis.