Early Diagnosis and Surgery is Crucial to Survival Outcome in Rhinocerebral Mucormycosis

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Sir,

The article by Kolekar [1] made for an interesting read. Their observations on the outcome of rhinocerebral mucormycosis in a predominantly diabetic patient population are succinct and an important addition to the scarce literature on this subject. However we feel that some addition of the crucial clinical data would possibly throw light on the factors responsible for survival outcome of patients.

It is widely recognized that a multimodal approach that involves an early diagnosis, aggressive surgical debridement, appropriate antifungal therapy and control of glycemic state improves survival in this invariably fatal condition in patients with diabetes [2, 3]. Of the 4 components of this approach, the first 2 are the most critical but are often the most difficult to achieve [2]. The diagnosis is often delayed due to non-specific symptoms and signs and the need for invasive procedures for confirmation [3]. The sinonasal debridement surgery needs to be performed before the infection spreads to other adjoining areas particularly the brain [2]. In this context, the missing information regarding number of days (mean and range) taken

to confirm mucormycosis and the timing of surgical debridement is very important. In our recent study on 4 children with Type 1 diabetes (T1D) and rhinosinus mucormycosis, the mean time to confirm the diagnosis was 3.5 days (range 1–7 days) and endoscopic or open surgery was performed within a week of hospitalization in all patients [4]. Our experience with invasive filamentous fungal infections in patients with T1D, predominantly caused by zygomycetes, is similar with the mean time from presentation to diagnosis of 5.8 ± 4.7 days (range 1–14 days) and debridement surgeries performed immediately after confirmation of diagnosis [5]. The relatively better outcome in our patients was probably a result of earlier diagnosis and treatment effected by a very dedicated team of pediatric endocrinologists, otolaryngologists, mycologists, histopathologists, intensivists, and pediatric surgeons at our center [4, 5]. The overall survival rate of 55 % in the study by Kolekar, although at par with most centers in the world, could be related to the differences in the timings of diagnosis and surgery in their patients. It is possible that the 11 patients who survived were operated earlier as compared to those who died. Thus addition of this crucial information may allow us to determine that the outcome was influenced by the timing of diagnosis and surgery. This information can be easily retrieved from the hospital records of these patients and presented in a subsequent issue of IJOHNS. Also the addition of information regarding the predisposing factors for mucormycosis such as poor glycemic control and ketoacidotic state in the studied patients will be very useful to the readers [5].

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