

Reply to: ‘Conservative’ approach to periocular necrotising fasciitis with paranasal sinus involvement

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Dear Sir/Madam,

Thank you for your interest in our article and for your valuable comments.

Our two patients were immunocompromised—one had just completed chemotherapy for lymphoplasmacytic lymphoma and the other had poorly controlled diabetes due to non-compliance to medication.

Our first patient who underwent orbital exenteration was initially managed conservatively with antibiotics and endoscopic sinus drainage from which she recovered partially but then deteriorated over a week. A second endoscopic sinus surgery procedure was performed to drain the loculation of pus in the orbit medial to the optic nerve. By then, the patient had already become blind. As anticipated, this medial surgical drainage was inadequate to address the reservoir of pus lateral to the optic nerve. As the eye was already blind and the patient noted to be immunocompromised with impending septicemia, orbital exenteration was performed to remove all the pus in the orbit that could potentially set her into septic shock despite antibiotic treatment.

The second patient was initially treated with endoscopic sinus drainage and debridement of unhealthy orbital tissue. However, as there was progression of disease, he had

to undergo aggressive serial debridement of facial tissue and repeat endoscopic sinus surgeries before there was recovery.

In our review of the literature, there were four other immunocompromised and seven immunocompetent patients with necrotising sinus and facial infections. Three of the four immunocompromised patients had to undergo aggressive and repeated surgeries. Unfortunately, two of the immunocompromised patients passed away. Comparatively, four of the seven immunocompetent patients underwent more aggressive and repeated surgeries compared to the other three. All of the immunocompetent patients survived. Although admittedly a limited sample size, one can see that a preexisting immunocompromised state may make the prognosis worse and when a low threshold for further surgery, radical as necessary, would be lifesaving.

We acknowledge the debilitating nature of orbital exenteration and extensive debridement of facial tissue. While a more conservative approach may initially be attempted for patients with no comorbidities and a healthy immune system, a significant proportion of patients with necrotising sinus and facial infections are immunocompromised and at high risk of mortality from sepsis. Hence, we believe that aggressive and lifesaving measures should be considered early in such patients.

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