Diagnosis and Management of Nocardia Keratitis

We read with interest the recent article by Tendolkar et al. (5). We have been seeing and treating cases of Nocardia keratitis for a long time and have published our experiences previously (3, 4). We would like to share some of our observations on this condition for the benefit of JCM’s readers. Nocardia keratitis can occur in immunocompetent patients following minor trauma (3). While lagophthalmos may predispose patients to Nocardia keratitis, it is not specific for this organism. Lagophthalmos is known to predispose individuals to a variety of bacterial and fungal infections of the cornea (our unpublished experience).

Cases of infectious keratitis are normally investigated by smear examination and culture of corneal scrapings. Gynecological and otolaryngological investigations are of little relevance.

The treatment of Nocardia keratitis is quite well established, with amikacin emerging as the best drug (1) with the lowest MIC for Nocardia isolates from corneal ulcers. Traditionally used sulfa group drugs are now being replaced with aminoglycosides and biguanides (2). Systemic antibiotics have little role in the treatment of bacterial keratitis.

REFERENCES

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Author’s Reply
In response to Dr. Sharma, I would like to mention that lagophthalmos occurring in the patient with tuberculoid leprosy could have been the predisposing factor for development of the Nocardia corneal ulcer due to the dry eye resulting from the deformity, a fact clearly mentioned in our article (2). We did not intend to suggest that lagophthalmos is a condition specific for Nocardia. It is rather the effect of dry eye caused by lagophthalmos that could result in ulcerations caused by various opportunistic organisms, including Nocardia, as stated in our article.

Nocardia species are associated with environmental materials. Pulmonary and disseminated nocardioses are known clinical entities, with occasional seeding of the eye and traumatized tissue (1). Gynecological, medical, otolaryngological, and dental examinations are carried out on all our patients with corneal ulcers as a policy to rule out any active septic focus. Moreover, our patient was not otherwise healthy but had a systemic disease, leprosy, and had developed an ulcer spontaneously, which warranted a thorough examination.

Since the corneal ulceration with the serious sequela of hypopyon had occurred in the patient spontaneously, systemic therapy was given. In a patient debilitated with disease, the treatment modality differs, with adequate and often long-term therapy (1). In a patient with disease, defenses are compromised, so that the patient may be little more than culture medium as viewed by the organism. With the therapy described in our article, the patient showed a marked improvement within 12 days and was discharged after a 2-week stay in the hospital.

REFERENCES

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