

# Management strategies in vision-threatening sclerokeratouveitis

Dear Editor,

Sclerokeratouveitis is a devastating ocular pathology that is less commonly reported. Prompt diagnosis, timely treatment, and meticulous follow-up are needed to manage these high-risk cases. We read the interesting case report by Rio *et al.* in the recent issue of *Taiwan Journal of Ophthalmology*, and we must congratulate the authors for bringing out this rare fungus probably the first report of *Alternaria chartarum* sclerokeratouveitis.<sup>[1]</sup> However, we have a few important observations and suggestions to make.

First, the diagnosis of sclerokeratouveitis alone is not enough, and it should be revised to *Alternaria chartarum* panophthalmitis with a serous retinal detachment based on the B scan findings. The B scan image, in this case, would have been interesting to rule out endophthalmitis in the first visit itself as these patients may have subtle vitritis which is a pointer toward evolving endophthalmitis.<sup>[2]</sup> In panophthalmitis, all the three coats of the eyeball sclera, retina, and choroid are involved including the extraocular muscles whereas endophthalmitis refers to the purulent infection of the aqueous and the vitreous due to infection by microorganisms.

Second, the authors have mentioned that the cornea showed diffuse infiltrates, stromal edema, and a feathery 2-mm hypopyon in the anterior chamber. These findings and the clinical image are indicative of infectious fungal<sup>[3]</sup> or *Pythium*<sup>[4]</sup> etiology, but the patient was continued on topical and oral prednisolone which is the primary reason for progressive infection in this case. Ideally, steroids should have been stopped and antifungals in the form of natamycin and voriconazole should have been started. Can the authors throw some light on this for the benefit of the readers?

Third, before enucleation, the ideal management could have been a therapeutic keratoplasty (TPK) on the 7<sup>th</sup>–10<sup>th</sup> day and incision and drainage for the scleral plaque when the infiltrate was progressing toward limbus and 1–2 weeks later a pars plana vitrectomy for endophthalmitis.<sup>[5]</sup> Enucleation must be kept as a last resort as sometimes a good and timely done TPK can eliminate the infectious foci in these cases and has good anatomical outcomes.

Finally, we also want to share the experience of one of our cases with a temporal scleral abscess which later progressed to involve the temporal limbus and one-third cornea. Initially, the patient was managed with multiple incisions and drainage of the abscess. Later, a TPK was attempted to eliminate the infectious. The patient was positive for aspergillus and fusarium. On the final follow, the patient had developed panophthalmitis and the eye had to be enucleated. In general, for scleral abscess drainage, after a small conjunctival peritomy, the area of scleral abscess is exposed and a small partial-thickness (one-third depth) cruciate incision is given making sure not to perforate the sclera. Then, the purulent content is scooped out with a spatula or the blade itself. Once the scleral abscess is drained, the exposed area is meticulously cleaned with 5% povidone-iodine antiseptic and left open for healing. In addition, the purulent contents are sent for smearing and culture of the microorganism. Postoperatively, the patient is continued on antibiotics and antifungals based on the smear and culture results.

The take-home message from these cases is that sclerokeratouveitis and scleral abscess are dreaded clinical entities that should be managed aggressively. The fungal species are a common cause in these scenarios and must be managed with timely antifungals. Steroids are contraindicated in such situations and should not be used. Once again, we congratulate the authors for bringing out this interesting case and stimulating the research minds.

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## Conflicts of interest

The authors declare that there are no conflicts of interests of this paper.

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