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Financial interest: none

Eye (2007) **21**, 269–271. doi:10.1038/sj.eye.6702509;
published online 14 July 2006

Sir,
**Combined fungal and acanthamoeba keratitis:
diagnosis by *in vivo* confocal microscopy**

We report an interesting case of corneal ulcer due to combined fungal and acanthamoeba infection, which was diagnosed by *in vivo* confocal microscopy.

Case report

A 32-year-old male patient presented with a history of redness, pain photophobia, and blurred vision in the right eye of 1-week duration. He is an agriculturist by profession. There was no history of contact lens wear or trauma to the eye.

His best-corrected visual acuity was counting fingers close to face and 6/6 in the right and left eye. Slit-lamp examination of the right eye revealed a corneal ulcer involving the temporal cornea extending from 7 o'clock to 11 o'clock along with a hypopyon (Figure 1). The left eye was normal. *In vivo* confocal microscopy (Rostock cornea module with HRT II, Heidelberg Engineering,

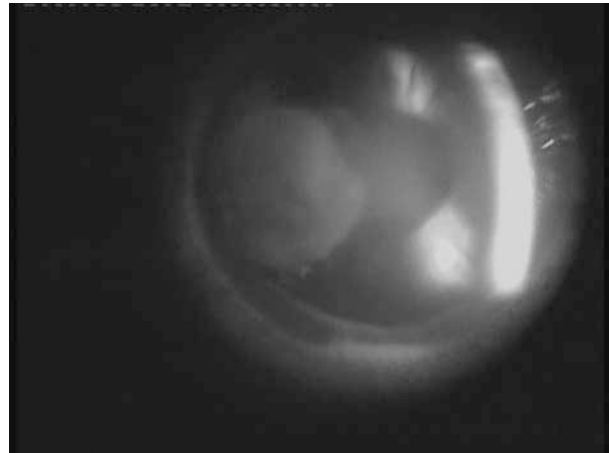


Figure 1 Slit-lamp photograph of the right eye showing corneal ulcer in the temporal cornea with hypopyon at presentation ($\times 10$).

Heidelberg, Germany) revealed plenty of fungal filaments, a few acanthamoeba cysts and trophozoites (Figure 2a and b). Corneal scraping for fungus revealed *Fusarium* species. Culture for bacteria and acanthamoeba were negative. He was started on hourly application of Natamycin 1%, propamidine, and polyhexamethylene biguanide (0.02%) eye drops. *In vivo* confocal microscopy was used to monitor the response of the treatment. Natamycin eye drops were tapered and eventually stopped after 40 days, whereas propamidine and polyhexamethylene biguanide were stopped after 3 months. At the third month follow-up, the ulcer has healed well with scarring and vascularisation. His best-corrected visual acuity in the right eye had improved to 6/9. Confocal microscopy showed plenty of dendritic cells at the area of the corneal ulcer. No fungal filaments, acanthamoeba cysts, or trophozoites were noted.

Discussion

In vivo confocal microscopy using the principle of confocal microscopy, with an axial resolution of 5–10 μ and lateral resolution of 1 μ , enables us to understand the pathology at a cellular level.^{1,2} The early detection of double-walled acanthamoeba cysts and trophozoites on confocal microscopy in this patient, with no growth on culture, completely alters our management and eventually a good prognosis.² Follow-up of these corneal ulcers with confocal microscopy helps us understand the changes occurring at the cellular level and moderate our treatment accordingly. We feel this tool can be used in our day-to-day practice in the management of combined corneal infections.

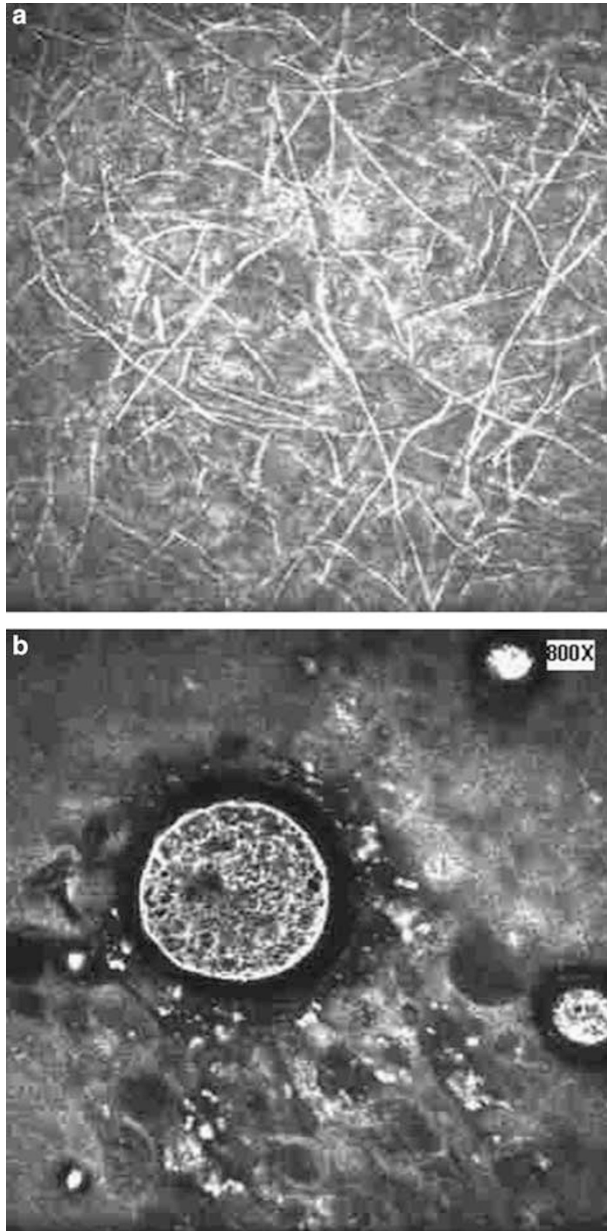


Figure 2 (a) *In vivo* confocal microscopy showing plenty of linear fungal filaments ($\times 800$). (b) *In vivo* confocal microscopy showing double-walled acanthamoeba cysts ($\times 800$).

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Proprietary Interest: The authors have no financial interest in any of the materials used in the study

Eye (2007) **21**, 271–272. doi:10.1038/sj.eye.6702510;
published online 14 July 2006

Sir,
Screening for wet AMD by optometrists: resistance to change or professional rivalry?

I commend Ellis *et al* (*Eye* 2006; **20**: 521–522) on very clever disguise of their own resistance to change by use of eloquent but nonscientific arguments, clichés, and anecdotes. In simple English, there are following questions that need to be answered before screening for any disease is considered:¹

1. Is the condition important for individuals or the community?
2. Is there effective treatment or management of the condition?
3. Is the condition's natural history, especially its evolution from latent to overt, understood?
4. Is there a recognisable latent or early stage?
5. Is there a valid and reproducible screening test?
6. Are facilities available for management of the positive findings, both true or false?
7. Is there an agreed management policy?
8. Does this management favourably influence the course of the disease?
9. Is the cost of case finding and management acceptable in relation to the overall costs of health care?
10. Do the potential benefits to true positives outweigh the potential disadvantages for the false positives?

With latest results of antiangiogenic therapies,² and advances in diagnostic technology,³ I believe the answer to all of the above, except questions 7 and 9, is already