Reviewer's report

Title: Successful treatment of two postoperative endophthalmitis cases due to Aspergillus flavus and Scopulariopsis spp. with caspofungin

Version: 2 Date: 15 August 2006
Reviewer: Marc D de Smet

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General
The article discusses the treatment of post cataract endophthalmitis in 2 cases due to 2 different fungi in which among other drugs, caspofungin was used as an antifungal agent.Authors are claiming that the treatment's success was due to the use of caspofungin as toxicity developed to the other agent given concurrently. In the discussion, their concluding remarks claim that the unique nature of their treatment lies in the combination of anti-fungal agents.
It would seem to me that the article would be of greater scientific interest if the added value of caspofungin was better described in single or combined therapy. Another possible focus could be on the circumstances in which the second fungus is observed.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

In the introduction,
- the first sentence claims that endophthalmitis is an inflammatory response. This is misleading - inflammation does not imply infection. Endophthalmitis refers to an ocular infection of which inflammation is a component.
- In reference 2, 20% refers to fungi + nocardia sp (for which there is a debate as to its fungal nature). It should also be stated that this study was carried out in India where the risk of endophthalmitis is notoriously higher than the more northern climate of Europe or 2/3 of the USA. This should be specified in the text.
- while amphotericin remains an important therapeutic modality, imidazoles have an increasing role starting with the use of fluconazole which is active against most candida species with good penetration. It is surprising that this drug was not considered as an alternative to a very toxic drug such as amphotericin B. It is therefore a little misleading to claim in the second to last paragraph of the introduction that voriconazole and caspofungin were developed as alternatives to amphotericin. More precisely, they were developed due to the incidence of resistance and for better bioavailability from an oral route.

In the case description,
- in case one
  - how long before was the patient treated for colon cancer and had chemotherapy?
  - how well controlled was the diabetes at the time of surgery? Had the patient signs of diabetic end organ disease?
  - both intravitreal and anterior chamber amphotericin treatment is a novel approach. Any particular reason for this approach. Is there precedent for this approach elsewhere? What is the additional risk of retinal toxicity given that the therapeutic window for amphotericin is very narrow.
- in case two
  - when did the gastrectomy take place? Had the patient received hyperalimentation at the time of the surgery, or shortly before the cataract surgery.
  - did the patient have any gastroesophageal symptomatology?
  - define SMD for a non ophthalmic readership

Conclusion
- same argument regarding the incidence of fungal endophthalmitis

References:
- the name of the first author in reference 1 seems truncated.
There is no legend for figure 1
Finally, there are several typographical errors, most of which would be picked up by using a decent spell checker. I would certainly recommend its use to the authors. There are also here and there a few typographical errors in drug names which will have to be screened separately.
Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

**What next?:** Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

**Level of interest:** An article of limited interest

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No

**Declaration of competing interests:**
I declare that I have no competing interests