Acanthamoeba spp. cases in keratitis patients in Jakarta
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ABSTRACT

Background:

Acanthamoeba spp. is a free living amoeba which lives naturally in environment such as soil, fresh water, waste water, brackish water, sea water, swimming pool, and flow water. Acanthamoeba keratitis incidence in USA is quite high. In Indonesia, there are a lot of reports on keratitis due to bacteria, fungus or virus and hardly any report due to Acanthamoeba. The aim of this study is to identify Acanthamoeba from corneal scraps or soft lens solution of patients with keratitis in Jakarta.

Methods:
The subjects of this study were the patients who visited the ophthalmology clinic at Cipto Mangunkusumo Hospital and Jakarta Eye Center from September 2006 until December 2007. The specimens were corneal scraps, put in transport media either PAGE salt or 0,9% sterile saline solution. The samples were then centrifuged and made wet smear with lugol/eosin solution, dried smear and stain with giemsa. The remaining of the specimen was poured onto non nutrient agar plate and added with solution of Escherichia coli. Acanthamoeba castelani was made as positive control for culture. The plate was then incubated at 300 C and monitored everyday up to 10 days.

Results:
There were 20 samples collected during 1 year consisted or 19 corneal scraps and one contact lens solution. There were 3 positive from the corneal scraps which were detected by direct smears and giemsa staining. None of the culture gave positive result, however the positive control did grow.

Conclusion. Acanthamoeba spp was one of the pathogens causing keratitis in Jakarta.

Key word: Free-living Amoeba, lab diagnosis, keratitis