BMC Infectious Diseases

POSTER PRESENTATION Open Access

Nocardia asteroides ocular infection

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From 2nd International Science Symposium on HIV and Infectious Diseases (HIV SCIENCE 2014) Chennai, India. 30 January - 1 February 2014

Background

Nocardia asteroides can cause ocular infection in immunocompetent and immunocompromised individuals following minor trauma. Hence present study was carried out to isolate *N. asteroides* from the patients attending a tertiary eye care hospital and to analyse the antibiotic susceptibility pattern of the *Nocardia* isolates.

Methods

The ocular samples *viz.*, corneal swab, corneal scraping, aqueous tap and vitreous tap were processed for culture and the isolated *Nocardia* species were further confirmed for speciation by standard microbiological procedures. Antibiotic susceptibility analysis for the confirmed isolates of *N. asteroides* was performed by agar disk diffusion method following the guidelines of Clinical Laboratory Standard Institute (CLSI, 2000).

Results

Out of 280 ocular clinical specimens collected, 25 isolates of *N. asteroides* were obtained. The rest of the pathogens included bacteria, fungi and mixed culture. The age in most of the cases yielding *Nocardia* was below 5 years (12%) and above 60 years (52%) and men (76%) were more infected than women (24%). Precisely, 17 isolates of *N. asteroides* were isolated from corneal ulcer, 5 from corneal swab and 3 from endophthalmitis. Upon analysis of antibiotic susceptibility tests the nocardial isolates were found to be more susceptible to fourth generation fluoroquinolones antibiotic family (75%), amikacin (66%), ampicillin (80%), vancomycin (50%) and norfloxacin (75%).

Conclusion

Ocular nocardiosis remains difficult to recognize, there by leading to misdiagnosis and underestimation of its incidence.

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Published: 27 May 2014

doi:10.1186/1471-2334-14-S3-P2
Cite this article as: Shobana *et al.*: *Nocardia asteroides* ocular infection. *BMC Infectious Diseases* 2014 **14**(Suppl 3):P2.

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