

POSTER PRESENTATION

Open Access

Resistance pattern of *Acinetobacter* spp. isolated from various clinical samples in and around Kanchipuram

S Senthamarai*, S Sivasankari, C Anitha, V Venugopal, SK Amshavathani

From First International Science Symposium on HIV and Infectious Diseases (HIV SCIENCE 2012) Chennai, India. 20-22 January 2012

Background

For the past two decades *Acinetobacter* spp. has been emerged as an important pathogen in various infections. Emergence of multi drug resistance limits the therapeutic option. So this study is aimed to determine the antibiotic resistance pattern of *Acinetobacter* spp. from various clinical samples.

Methods

The study included a total of 1516 samples of which 892 were from pus and 624 were from sputum collected from patients at Meenakshi Medical College and Research Institute, Kanchipuram from Nov 2010 to August 2011. Samples were processed and identified according to standard protocol. The *Acinetobacter* spp. isolates were tested for antibiotic resistance against 16 antibiotics by Kirby Bauer disc diffusion method (CLSI guidelines).

Results

Out of 1516 samples collected, 50 (3.3%) *Acinetobacter* spp. was isolated. Among which 35/50 (70%) were from pus, 15/50 (30%) were from sputum. All the isolates were found to be 100% resistant to ampicillin, 76% resistance to co-trimoxazole cefuraxime and ceftazidime, 64% to doxycycline. Ciprofloxacin and gentamicin showed 58% resistance, followed by netilmicin, amikacin and tetracycline with 57%, 50% and 46% resistance. Ofloxacin, sparfloxacin and levofloxacin showed 33%, 21% and 17% resistance. Least resistance was observed for amoxyclav, ceftriaxone/tazobactam and imipenem with 11%, 5% and 5% resistance respectively. Out of 50 isolates 31 (62%) were found to be multi drug resistant.

Conclusion

Multi drug resistance among *Acinetobacter* spp. is of great clinical importance which provacates the need to screen and formulate appropriate antibiotic policy for the hospitals and prevent further development and spread of resistant strains.

Published: 4 May 2012

doi:10.1186/1471-2334-12-S1-P57

Cite this article as: Senthamarai et al.: Resistance pattern of *Acinetobacter* spp. isolated from various clinical samples in and around Kanchipuram. *BMC Infectious Diseases* 2012 **12**(Suppl 1):P57.

Submit your next manuscript to BioMed Central and take full advantage of:

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at
www.biomedcentral.com/submit



* Correspondence: drthamaraihiagu@yahoo.co.in
Dept of Microbiology, Meenakshi Medical College and Research Institute, Kanchipuram, Tamil Nadu, India