

POSTER PRESENTATION

Open Access

Prevalence of multidrug resistant tuberculosis at tertiary care hospital

Madhurima Pothula*, P Sreenivasulu Reddy, P Vasundhara, Vedamurthy Reddy

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

Background

Tuberculosis continues to plague the world and remains the major global health problem. Simultaneously the incidence of drug resistant *Mycobacterium tuberculosis* strains is also increasing in almost all industrialized and developing countries.

Methods

This prospective study was done at NMC, Nellore from July 2008-December 2009. Samples received at microbiology lab for acid fast staining were included in this study. Smears were stained by Ziehl-Neelsen's technique. Samples were cultured on Lowenstein-Jensen media after processing by modified Petroff's method and incubated according to CLSI guidelines. Identification of *Mycobacterium tuberculosis* was done based on morphology, nitrate reduction test and catalase test. Drug susceptibility for first line anti-tubercular drugs was performed by proportion ratio method.

Results

A total of 2031 samples were included in this study. 120 samples were smear positive by acid fast staining, 110 were culture positive for *Mycobacterium tuberculosis*. 16 (14.5%) samples were resistant to one or more anti-tubercular drugs. 10 (9.09%) samples showed monodrug resistance, Isoniazid (3.63%) followed by Rifampicin (2.72%) Ethambutol (1.81%) and Streptomycin (0.90%). Isoniazid and Ethambutol resistance in one sample (0.90%). Isoniazid and Rifampicin resistance in two samples (1.88%). Three samples were resistant to Isoniazid and Rifampicin along with other drugs (2.72%). HIV co-infection among MDR-TB was 2.7%.

Conclusion

According to the present study prevalence of MDR-TB was 4.54%. Among the patients on treatment higher incidence of resistance was attributed to poor patient compliance in spite of effective DOTS programme.

Published: 4 May 2012

doi:10.1186/1471-2334-12-S1-P29

Cite this article as: Pothula et al.: Prevalence of multidrug resistant tuberculosis at tertiary care hospital. *BMC Infectious Diseases* 2012 12 (Suppl 1):P29.

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

 **BioMed Central**

* Correspondence: chinnupreddy@rediffmail.com
Narayana Medical College and General Hospital, Nellore, A.P, India