

Adverse events in multi-drug resistant tuberculosis patients registered at DOTS-Plus site, AIIMS, New Delhi

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Abstract

Background: According to Global Tuberculosis Report 2017, there were an estimated 10.4 million incident cases of TB in 2016 in the world (140 cases per 100 000 population). Drug-resistant TB is a persistent threat, with 490 000 million cases of multidrug-resistant TB (MDR-TB) emerging in 2016 and an additional 110 000 cases that were susceptible to Isoniazid but resistant to Rifampicin (RR-TB). One of the major obstacles in achieving successful treatment outcomes in DR-TB is the adverse events affecting the adherence to the both first-line and second-line TB drugs. Aim of the present study was to evaluate adverse events due to the second-line drugs (SLDs) in MDR-TB patients during first year of treatment.

Methods: A prospective cohort study was conducted at DOTS Plus site at AIIMS, New Delhi. Eighty-one MDR-TB patients were recruited consecutively from June 2014 to May 2015 and were given standardized Category IV drug regimen under Revised National Control Tuberculosis Programme (RNCTP). Patients were followed-up till one year after initiation of treatment and adverse events were primarily recognized and documented with clinical evidence and/or laboratory investigations.

Results: A total of 91 adverse events were reported in 52 (64.2%) patients. The grouped adverse events were most commonly gastrointestinal (70.6%), arthralgia (10.9%), ototoxicity (6.4%), psychiatric (5.5%), and hypothyroidism (2.1%). Out of 81, 9 (11.1%)

patients had serious adverse events requiring discontinuation or substitution of drugs which included psychiatric disturbances and ototoxicity.

Conclusions & Recommendations: Adverse events among MDR-TB patients are one of the major areas which is affecting cure rate of DR-TB patients. Further improvement in monitoring and management of adverse events may enhance the cure rate of MDR-TB patients.

Biography:

Gaurav Gupta has completed his MD, Medicine from All India Institute of Medical Sciences, New Delhi, 110029, India. He is currently working in the Department of Medicine and Infectious Diseases at All India Institute of Medical Sciences, New Delhi. He is Author of a book "Review of Medicine" for undergraduate students, and has participated in formation of INDEX-TB guidelines