



STUDY OF PATTERN OF RESISTANCE IN SECOND LINE DRUGS IN A PATIENT WITH MULTIDRUG RESISTANCE TUBERCULOSIS.

Pulmonary Medicine

Dr. Digvijay Patil	Department of Pulmonary Medicine, Grant Government Medical College and Sir J.J Group of Hospital, Mumbai.
Dr. Priti L. Meshram	Department of Pulmonary Medicine, Grant Government Medical College and Sir J.J Group of Hospital, Mumbai.
Dr. V.V Pujari	Department of Pulmonary Medicine, Grant Government Medical College and Sir J.J Group of Hospital, Mumbai.
Dr. R. R Hegde	Department of Pulmonary Medicine, Grant Government Medical College and Sir J.J Group of Hospital, Mumbai.
Dr. S. A. Agale	Department of Pulmonary Medicine, Grant Government Medical College and Sir J.J Group of Hospital, Mumbai.
Dr. Sanchit Mohan	Department of Pulmonary Medicine, Grant Government Medical College and Sir J.J Group of Hospital, Mumbai.

ABSTRACT

Background We studied and evaluated the resistance of second-line drugs in MDR TB patients who were started on Bedaquiline (BDQ) with an optimized background regimen (OBR) containing Fluoroquinolones (moxifloxacin/levofloxacin), Clofazimine, Cycloserine, Ethionamide, Amikacin, Pyrazinamide and Linezolid. **Method** The study was carried out in 100 patients over the past 6 months who were started on BDQ (Bedaquiline) based regimen. Patients were above 12 years of age and were following up in the department of pulmonary medicine at J.J. Hospital, Mumbai. **Study Design** Retrospective observational study. **Observation** Out of 100 patients, 57 were females and 43 were males. 51 patients were in the age group between 12-40 years and 43 were in the age group of 40-60 years and 5 were in the age group of 60-80 years. Resistance to high dose Moxifloxacin was seen in 49 patients. Linezolid resistance in 32 patients. Pyrazinamide resistance in 6 patients, Ethionamide resistance in 4 patients and Amikacin resistance in 3 patients. 2 patients showed Cycloserine resistance and Bedaquiline (BDQ) resistance was seen in 1 patient. Resistance to both Moxifloxacin (high dose) and Linezolid was seen in 3 patients out of which 2 died and 1 was lost to follow up. The remaining 97 patients continued to follow up. **Conclusion** Our study showed a high resistance to Moxifloxacin and Linezolid. Both are important second line drugs in OBR for BDQ based regimen. Resistance to one or either of the drugs makes it difficult for an OBR to be designed for patients, which can lead to poor treatment outcome.

KEYWORDS