

## **Tuberculosis with extensive resistance to drugs in a tuberculosis reference center in São Paulo, Brazil**

**Resumo do Artigo publicado na Revista Chest (American College of Chest Physicians), v. 136, pp. 73S-73S, 2009.**

**Marcia Telma G. Savioli, MD\*, Jorge I. Neto, MD, Elisabete A. Almeida, BS, Nelson Morrone, MD, Fernando F. Melo, MD, Maria T. Ortega, MD and Denise S. Rodrigues, MD**

Instituto Clemente Ferreira, Sao Paulo, Brazil

**PURPOSE:** Mycobacterium tuberculosis resistant to all second-line drugs (XDR-TB) has been emerged worldwide and become a threat to tuberculosis control. The aim of this work was to determine the occurrence of XDR-TB, as well as the epidemiological, clinical and bacteriological characteristic of these patients.

**METHODS:** From 1994 to 2008, about 700 patients were considered MDR-TB. This report includes those isolates whose cultures were tested for susceptibility to second-line drugs, after what they could be considered as XDR-TB. It was evaluated: epidemiological, clinical and bacteriological patient characteristics, treatment outcomes, variation of susceptibility profiles of patient between different samples, and primary or secondary characteristic of resistance.

**RESULTS:** To access the XDR-TB problem, second-line testing was analyzed on isolates from MDR-TB patients identified in routine drug-resistant of our center. Among all patients, 17 (2.4%) had XDR-TB. Primary resistance was identified in three cases. Three patients were HIV-positive and two had diabetes mellitus. In all patients were collected at least two sputum with culture performed at different moments. In the patient follow up, we identified 5 successfully treated, 11 failed and 6 died. Only one case was cured upon surgical intervention. There was no correlation between cures, failed, susceptibility test and treatment regime. Patients received individualized treatment that consisted of ampicillin, ofloxacin and at least 3 other drugs. It was observed 68% of resistance for ofloxacin. Patients had a long-term follow-up of 1 to 10 years after MDR-TB diagnostic.

**CONCLUSION:** There is an urgent need for more accurate monitoring systems for XDR-TB especially in countries with a high TB burden. It is preoccupant the increased cases of resistance to ofloxacin as it is included in the most MDR-TB therapy. Although, in most of case, XDR-TB has a poor prognostic, patients can be cured, or at least stabilized.

**CLINICAL IMPLICATIONS:** The prevalence of XDR tuberculosis continues to rise, which requires a multifaceted approach to address this epidemic.

**DISCLOSURE:** Marcia Telma Savioli, No Financial Disclosure Information; No Product/Research Disclosure Information