

## **EXTENSIVELY DRUG RESISTANT TUBERCULOSIS IN A HIGH INCOME COUNTRY: A REPORT OF FOUR UNRELATED CASES**

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Purpose of the Study: Multi drug resistance of *Mycobacterium tuberculosis* (*M. tuberculosis*) remains a major threat to public health, reinforced by recent reports about the clinical course of patients infected by extensively drug resistant (XDR) strains in South Africa. There is little information about the clinical course of XDR tuberculosis patients in industrialised countries.

Methods: We evaluated all isolates of *M. tuberculosis*, in which drug susceptibility testing was performed at our institution since 1997, for multi and extensive drug resistance. Clinical courses of patients infected by strains fulfilling the recently revised criteria for XDR tuberculosis were analysed.

Results: Four XDR *M. tuberculosis* isolates were identified. All patients had immigrated to Germany from Eastern Europe and Russia and none were infected by the human immunodeficiency virus. All patients were treated for tuberculosis for several years and three received 4.5 to 6 years of in-hospital treatment in Germany. Non-compliance was an important factor in all four patients, three patients had to be treated in Germany's only locked facility for tuberculosis treatment. One patient with XDR tuberculosis died, one patient had still open pulmonary tuberculosis at last contact and 2 patients were cured.

Conclusion: Cases of XDR tuberculosis have been treated in our region for several years. Even in a high income setting, XDR tuberculosis has a tremendous impact on quality of life, outcome and the expense of medical resources. All efforts to prevent the spread of XDR tuberculosis must be made and maintained.