

Topic: B12 Tuberculosis

Title: Multi-drug resistant Tuberculosis in new and previously treated TB patients in Ouagadougou, Burkina Faso

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Text: Background: Data on the multiresistant TB in Burkina Faso are almost inexistent. This study was performed to assess the multi-drug resistance TB (MDR-TB) in new and previously treated pulmonary TB patients in Ouagadougou, Burkina Faso.

Methods: A total of 445 patients diagnosed by sputum smears microscopic examination were enrolled in Ouagadougou from April 2005 to September 2006. Sputa were inoculated into Loewenstein-Jensen (LJ), LJ+Pyruvate and LJ+TCH media. Isolates were identified by colony morphology, growth time, bacteria morphology, resistance to TCH and activity to usual biochemistry tests. Their susceptibility to isoniazid, ethambutol, streptomycin and rifampicin was done by the proportion method. Blood samples were collected from consenting patients and tested for HIV antibodies. Data were analyzed using the Chi square test.

Results: Mycobacteria were isolated from all sputa, including 403 (90.6%) Mycobacterium tuberculosis, 14 (3.1%) M. africanum, 1 (0.2%) M. bovis and 27 (6.1%) atypical strains. In the 314 new cases, the global rate of resistance to antiTB drugs was 12.4% with 7.3% strains of the tuberculosis Complex resistant to 1 drug, 2.9% to 2 drugs, 0.3% to 3 and 1.9% to 4. MDR was found in 3.2% cases. Among the isolates from 131 previously treated patients, drug susceptibility testing was performed for 89 (68%) M. tuberculosis strains: 67.4% were resistant to all drugs tested and the MDR-TB rate was 51.6%. Three-hundred and six were tested for HIV, of which 89 (29.1%) were positive. No statistical significance was found between patient HIV sero-status and TB-drug resistance ($P>0.05$).

Conclusions: The rate of TB-drug resistance is particularly high in previously treated TB patients. There was no significant association between resistance and patient sero-status. However, the National Programme against Tuberculosis has to increase its efforts to limit the spread of MDR-TB in Burkina Faso.

Country of research: Burkina Faso

Ethical Research Declaration: Yes

Scholarship: Registration fee for the conference (includes access to all sessions and exhibitions)
Air travel (pre-paid ticket at the lowest fare available, from the nearest international airport)
Accommodation (shared in hotel twin rooms for the days of the conference)
Modest daily living allowance for the conference duration (19-22 July 2009, the equivalent of US\$30 per day)

Conference: 5th IAS Conference on HIV Pathogenesis Treatment and Prevention · Abstract: A-155-0068-01080 · Status: Draft

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