Incidence of tuberculosis immune reconstitution inflammatory syndrome (TB-IRIS) in a primary health care antiretroviral clinic in Khayelitsha.

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Acknowledgements (Sponsors)

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Background

The incidence of tuberculosis (TB) in Khayelitsha is 1612/100,000. 76% of patients with TB are co-infected with HIV and 25% of patients initiating antiretroviral therapy (ART) are on treatment for TB. The Ubuntu clinic is a pilot site for the integration of TB and HIV services. Over 2000 patients have been initiated on ART since 2001 and 2000 patients per year are being treated for TB in this clinic.

Objective

- To determine the incidence and clinical presentation of TB IRIS

Methods

- Ongoing prospective cohort of adults started on ART whilst on TB treatment from January 2006 to April 2007. Participant's clinical parameters were monitored fortnightly for a period of two months after initiation of ART. In addition blood has been drawn for ELISpot analysis. The main outcome was TB IRIS with suspected cases being referred to secondary care for investigation and further monitoring.

Results

At data censoring on 25th May 2007, 55 participants had been enrolled in the study, 35 female, 20 male. The average age was 35.0 ± 7.6 years. The median CD4 nadir was 48 /mm3 (IQR 29-131). 25% of patients had a previous history of TB. The median interval from commencing TB treatment to ART was 78 days (IQR 55-144). 11 (20%) patients developed TB-IRIS. Three patients developed new cervical lymphadenopathy on a background of disseminated or pulmonary TB. Four developed worsening pulmonary symptoms or signs in the context of smear negative PTB (2), smear positive PTB (1) or miliary disease (1). Three patients developed new neurological symptoms and signs, in one case leading to death 11 days after starting ARV. Lastly, one patient developed jaundice and hepatomegaly on a background of disseminated TB. The median time to TB-IRIS onset after starting ART was 13 days (Range 7-28 days).

Discussion and Future Perspective

As a consequence of the high TB incidence, TB-IRIS is a relatively common and diverse complication of ART. Future work is aimed at determining the cause, and improving the diagnosis and management of TB-IRIS.