Poster Exhibition
Track B - Opportunistic Infections

WEPE0165 - Altered Clinical Manifestation of Tuberculosis (TB) in HIV-infected persons receiving highly active antiretroviral therapy (HAART)

A.C.K. Chan<sup>1</sup>, F.A. Bognar<sup>2</sup>, I.K.Y. Mak<sup>1</sup>, K.L.S. Cheng<sup>2</sup>, K.C.W. Chan<sup>2</sup>, K.H. Wong<sup>2</sup>, C.C. Leung<sup>1</sup>, C.M. Tam<sup>1</sup>, D.W.L. Mak<sup>2</sup>

<sup>1</sup>Tuberculosis & Chest Service, Department of Health, Hong Kong, Hong Kong, <sup>2</sup>Integrated Treatment Centre, Department of Health, Hong Kong, Hong Kong

**Background:** HAART has been shown to reduce the risk of developing TB among HIV-infected persons. However, there is little data on the effect of HAART on clinical presentation of HIV-associated TB. To assess whether clinical presentation of TB in HIV-infected persons is affected by HAART, we reviewed the clinical charts of HIV-infected adults with tuberculosis who were seen at either government chest clinics or the HIV clinic (Integrated Treatment Centre) of Hong Kong from January 1996 to June 2005.

**Methods:** Retrospective case record review. Demographic and clinical data related to TB and HIV were compared by antiretroviral therapy status using Chi-squared and Mann-Whitney U tests.

**Results:** During the study period, 146 HIV-infected persons were diagnosed with TB at the above clinics. These patients represented about 60% of all HIV-associated TB patients diagnosed in Hong Kong during the same period. One hundred and thirty (89.0%) were male. The median age was 38 (range 19-75). Most were either Chinese (79.5%) or non-Chinese Asians (19.2%). Eighty-four (57.5%) were diagnosed with HIV at TB diagnosis. Fifty-eight (39.8%) were known to be HIV-positive but only 17 (29.3%) were on HAART. Patients on HAART were more likely to have a lower viral load (106999 vs. 319940, p<0.001) and typical chest radiograph (78.6% vs. 46.7%, p= 0.04). Patients on HAART also tended to have a higher CD4 count, less extrapulmonary involvement and a better treatment outcome though these results did not reach statistical significance. No significant difference in the incidence of drug toxicity according to antiretroviral therapy status was recorded.

**Conclusions:** HAART can alter the clinical manifestation of TB in HIV-infected persons. Larger scale, prospective studies that examine the full potential impact of HAART on the clinical presentation of TB in HIV-infected persons are needed. *Presenting author email: chikuen\_chan@dh.gov.hk*