

## **Body mass index changes during highly active antiretroviral therapy in Nigeria.**

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Wasting remains an important condition in HIV-infected patients receiving highly active antiretroviral therapy (HAART).

In this study, 120 patients with newly diagnosed HIV infection were prospectively evaluated to determine the effect of HAART on body mass index (BMI).

Eighty-nine (83.1%) patients gained weight, 5 (4.7%) had no weight change, and 13 (12.2%) lost weight. There was a significant increase in overweight and obese patients.

On multivariate analysis, time-updated CD4 count and higher baseline BMI were associated with a greater increase in BMI. Anaemia at diagnosis was associated with a significant increase in BMI.

There were no significant effects of age, sex, disease severity, viral load or educational status on BMI changes.

A linear association was observed between time-updated CD4 count and increase in BMI. The association between time-updated CD4 count and greater increase in BMI suggests that BMI could be a surrogate for CD4 count in monitoring treatment response in resource-limited settings.

## **Risk of Tuberculosis among HAART Receiving HIV Patients Attending an ART Centre of West Bengal, India: A Prospective Cohort Study.**

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This prospective study was conducted to find out the incidence density rate and to identify the attributed risk factors of Tuberculosis development among ART receivers.

All patients who were registered in a nodal ART centre of India within 1st January 2008-31st December 2008 and had been initiated ART in the year of 2008 were considered as a cohort and were followed up till 31st December 2012.

This study was started with 169 ART receivers and ended with 129 patients.

During total 631.1 person-years observation, 39 TB cases (31 pulmonary and 8 extra pulmonary) were diagnosed.

TB incidence density rate reduced from 12.08/100 to 1.12/100 person-years during the follow up periods.

Cox regression model revealed that patients having past history of Tuberculosis were at 5 times higher risk (Hazard ratio = 5.205; 95 % CI 2.439-11.106; p = 0.000).

Patients with WHO clinical stage 3 or 4 at the time of enrolment had 2 times more risk of development of TB (Hazard ratio = 2.081; 95 % CI 1.502-2.884; p = 0.000).

This study highlighted that special attention should be paid on earliest identification of TB among the HIV patients who had past history of TB or suffering from WHO clinical stage 3 or 4 to prevent the silent transmission and multidrug resistance development of Tuberculosis in the community.

## Potential drug–drug interactions in HIV-infected children on antiretroviral therapy in Lagos, Nigeria

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**Background:** Multi-therapy is common in HIV-infected children, and the risk for clinically significant drug interactions (CSDIs) is high. Study investigated the prevalence of CSDIs between antiretroviral (ARV) and co-prescribed drugs for children attending a large HIV clinic in Lagos, Nigeria.

**Methods:** The case files of pediatric patients receiving treatment at the HIV clinic of the Lagos University Teaching Hospital (LUTH), Idi-Araba, between January 2005 and December 2010 were reviewed. The ARV and co-prescribed drug pairs were evaluated for potential interactions using the Liverpool HIV Pharmacology Group website. The potential interactions were rated as A (no known interaction), B (minor/no action needed), C (moderate/monitor therapy), D (major/therapy modification), and X (contraindicated/avoid combination).

**Results:** Of the 310 cases reviewed, 208 (67.1%) patients were at risk of CSDIs. Artemisinin-based combination therapy was prescribed for over one-half of the patients, accounting for 40% of the CSDIs. Excluding this drug class, the prevalence of CSDIs reduced from 67.1% to 18.7% in 58 patients. Most of the CSDIs (579; 97.2%) were moderately significant and frequently involved nevirapine and fluconazole (58; 9.7%), zidovudine and fluconazole (55; 9.2%), zidovudine and rifampicin (35; 5.9%), and nevirapine and prednisolone (31; 5.2%). Age ( $P=0.392$ ), sex ( $P=0.783$ ), and moderate ( $P=0.632$ ) or severe ( $P=0.755$ ) malnutrition were not associated with risk for CSDIs.

**Conclusion:** There is a tendency for CSDIs between ARV and co-prescribed drugs among the group of children evaluated in this study. Measures are necessary to prevent important drug interactions and to manage those that are unavoidable.