**PP-162** Markers of adipocytokine and endothelial injury in antiretroviral-naive HIV patients

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**Background:** Untreated human immunodeficiency virus (HIV) infection is associated with increased risk for cardiovascular disease. Current data are limited and contradictory. Our aim is to investigate the markers of adipocytokine, endothelial injury and thrombotic activity and explore whether there are cardiovascular disease risk factors in antiretroviral-naive HIV patients.

**Methods:** Clinical data and venous blood samples were collected from 43 ARV naive AIDS patients during February–October 2009 in our center, and compared with 17 healthy subjects. Plasma leptin, adiponectin, soluble intercellular adhesion molecule-1 (sICAM-1), D-dimer were measured by enzyme-linked immunosorbent assay (ELISA). 4 markers and cholesterol, triglyceride, fasting plasma glucose were compared between the 2 groups. Spearman correlations between the significant markers and CD4+ T cells, CD8+CD38+/CD8+%, CD8+HLA-DR+/CD8+%, HIV viral load were examined among HIV-infected participants. Analyses were conducted by using Stata version 7.

**Results:** 88.37% of the 43 patients were sexually infected by HIV and the mean CD4+ T count was (133±82) cells/µL, HIV RNA was (4.42±0.66)log copies/mL. HIV-infected participants, compared with healthy subjects, had lower leptin, adiponectin (P = 0.0005, P = 0.0030) and higher sICAM-1 (P = 0.000). No significant differences exist in cholesterol, triglyceride, fasting plasma glucose. For HIV-infected participants, sICAM-1 tended to correlate with CD8+CD38+/CD8+% and HIV viral load (r = 0.3389, P = 0.0374; r = 0.4512, P = 0.0182).

**Conclusion:** Persons with untreated HIV infection have lower leptin, adiponectin and higher sICAM-1 levels and the relationship of these markers to HIV-mediated atherosclerotic risk requires further study.

**PP-163** No impact of TangHerb on the efavirenz plasma concentration among HIV-infected patients in China

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**Background:** The use of traditional Chinese medicine is widespread in China, even among HIV-infected patients. However, the potential drug interaction has not been well studied. We evaluate the impact of TangHerb (a proprietary Chinese medicine for AIDS treatment) on the efavirenz plasma concentration and the safety and efficacy of efavirenz when used in combination with TangHerb.

**Methods:** Fifty HIV-infected patients taking efavirenz containing antiretroviral regimens were enrolled. Twenty of them were taking TangHerb (eight capsules 3 times per day) together while 30 of them were not. Steady-state plasma concentrations of efavirenz were determined using HPLC-MS detection. Efavirenz associated central nervous system side effects and the frequency of viralogic failure were observed.

**Results:** No significant difference of the efavirenz concentration between these two groups was found (2765 ng/ml vs 2325 ng/ml, P = 0.25). No factors including age, gender, body mass index, alanine transaminase and CD4 cell count were associated with efavirenz concentration in mult-regression analysis. The frequency of efavirenz associated central nervous system side effects and viralogic failure were also comparable among these two populations.

**Conclusion:** TangHerb does not impact the EFV steady plasma concentration and its efficacy. It could be used safely together with EFV.

**PP-164** The clinical features of ocular manifestations in HIV/AIDS

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**Objective:** To promote the diagnostic rate of ocular diseases complicated with HIV/AIDS, understand clinical features of HIV-associated ocular diseases, enhance curative effects and improve the prognosis.

**Patients and Methods:** The clinical data and ophthalmic records in 92 cases of HIV/AIDS patients hospitalized from October 2008 to February 2010 have been collected retrospectively; and we focus on clinical features, ocular manifestations, ophthalmic examination, CD4 counts and opportunistic infections, in which ocular manifestations and CD4 counts were analyzed statistically with χ² test.

**Results:** We found that prevalence of retinopathy, most common HIV-associated ocular disease, was 34.8%; the
second was retinitis (27.5%); and rate of immune recovery uveitis was 2.2%. In HIV/AIDS patients with presence or absence of HIV-associated ocular diseases, prevalences of ocular manifestations were 56% and 46.5% (P > 0.05); those of tuberculosis were 30% and 30.9% (P > 0.05); mean CD4 counts were 87 cells/ul and 224 cells/ul (P < 0.05), respectively.

Conclusions: We found that retinopathy was most common HIV-associated ocular disease and the second was retinitis. Ocular manifestations were not diagnostic guidelines for HIV-associated ocular diseases, but CD4 count < 100 cells/ul was associated with HIV-associated ocular diseases. Immune recovery uveitis was most predominant IRIS. This highlighted that routine ophthalmic screening were needed in HIV/AIDS patients with CD4 count < 100 cells/ul.

PP-165 HIV infection having preponderance with parasitic influence of Plasmodium falciparum

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Objective: The Human immunodeficiency Virus (HIV) is the most serious emerging infection and Plasmodium Falciparum malaria is one of the most Prevalent infectious diseases. The present study was an attempt towards prevalence of P. falciparum infection among HIV infected population of Tripura, India.

Methods: A prospective cohort study was conducted on 331 HIV patients (18-48 yrs) at G.B. Pant Hospital, Tripura, India from February 2008 to August 2009. Samples were screened by HIV antibodies and to determine CD4+ T cell count. Standardized questionnaire was designed to access social and clinical risk factors (informed consent was taken from each patient).

Results: Among 331, the total severe malaria patients were 31 (10%). The prevalence of HIV infection rate was 32%, 107 patients were non-immune to malaria. Risk of severe malaria was increased in HIV-infected patients with a CD4+ T cell count of <20×10^6 cells/L (P < 0.001). Non-immune HIV-infected patients were significantly more likely to have severe malaria [11 (34%) of 34 patients] than were non-immune non-HIV-infected patients [7 (10%) of 72 patients]. HIV serostatus did not affect risk of severe malaria in the group from an area with endemicity [4 (6%) of 72 HIV-infected patients had severe malaria and 4 (2%) of 149 non-HIV-infected patients had malaria; (P = 0.212)].

Conclusion: Risk of severe malaria is almost 3 times greater for the HIV-infected groups. HIV-infected patients may develop excessive or aberrant immune responses that lead to increased disease severity. Malaria infection leads to a decrease in CD4+ T cell count and to loss of immune responsiveness to malaria antigens. Therefore, HIV-infected non-immune adults are at increased risk of severe malaria as this risk is associated with a low CD4+ T cell count which is a common factor occurring between the two infections.

PP-166 Assessment of the knowledge of AIDS and HIV related sexual risk behavior among university students in Maiduguri

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Objective: The aim of the study was to assess the knowledge of AIDS, sexual practices and attitudes to HIV infection amongst university of Maiduguri students.

Method: A cross-sectional study. A total of 600 students were randomly selected based on stratified sampling method. With the students stratified according to their faculties. Data collection was by means of a structured, and self-administered questionnaire. The questionnaire had different sections requesting information on socio-demographic characteristics of the respondents a section on knowledge of transmission and prevention of AIDS, and a sexual behavior section.

Result: Three hundred and twenty (53.3%) were males and 280 (46.7%) were females. The mean age of the respondents was 22.45±3.08 years. On a scale of 1–12 the mean knowledge score of the respondents was 9.42±1.809. The knowledge score was similar between males and female respondents (p > 0.3). Knowledge about HIV was found to improve with age, and with length of stay in the university (p < 0.05). The practice of high risk behavior was common among the student with early age at sexual debut (mean 16.32±3.57) multiple sexual partners (mean 3.71) and lack of condom use. Over sixty percent of the respondents endorsed premarital sex, although more than 70% were ready to submit themselves for HIV screening before getting married.

Conclusion: The findings in the study indicate that students’ knowledge regarding HIV/AIDS was high and their attitudes towards HIV patients were quite positive. However, despite this high level of knowledge, there were still some misconceptions and many in this group have participated in behaviors that elevate their risk of exposure to HIV infection.

PP-167 Establishment of TMA technique and the comparison between TMA and RT-PCR in detecting plasma HIVRNA of the patients with HIV infection

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Background: There are many nucleic acid testing (NAT) techniques in HIVRNA detection. Transcription mediated amplification (TMA) technique is well developing in many