P2.117 EFFECT OF HAART ON GASTRROINTESTINAL AND HEPATOBILIARY OPPORTUNISTIC INFECTIONS

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Background Opportunistic infections (OI) of gastrointestinal (GI) and hepatobilliary system (HB) are common in HIV infected patients. Despite highly active antiretroviral therapy (HAART) GI OI have been reported in HIV infected patients. There is paucity of data from south Asia describing occurrence of GI and HB OI in AIDS with use of HAART.
Method Study population included 74 HIV infected patients (Male = 57, Female = 17) in the age group of 17 to 63 years admitted to a tertiary care referral centre in North India from January 2011 through December 2012. Only subjects who presented with GI and HB system manifestations were enrolled in the study. 74 study subjects were stratified into HAART naïve (36) and HAART experienced (38) groups according to their HAART status on admission. HIV infection was confirmed by western blot test. Gastrointestinal and hepatobilliary pathologies including OI were diagnosed and defined as per standard protocols.
Results In HAART experienced group 33% and in HAART naïve group 52% patients were diagnosed with OI. Esophageal candidiasis was present in 10% patients in HAART experienced group and in 7% patients in HAART naïve group (p value > 0.05). Abdominal Tuberculosis was present in 24% patients in HAART experienced group and in 33% patients in HAART naïve group (p value > 0.05). Drug induced liver injury was present in 10 patients in HAART experienced group and in 5 patients in HAART naïve group.
Conclusion In our study we conclude that Gastrointestinal and Hepatobiliary OI are equally common in patients taking HAART; especially esophageal candidiasis and abdominal tuberculosis, reasons for this include HAART resistance, drug noncompliance, immune restoration inflammatory syndrome (IRIS) and high prevalence of tuberculosis in this region.

P2.118 THE IMPORTANCE OF HIV TESTING DURING PREGNANCY - A CASE REPORT

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A 7 year old Austrian girl presented with a 20-month history of oral thrush as well as onychomycosis of the hands. In addition, dysphagia suggested esophageal involvement. Her family history was negative for chronic mucocutaneous candidiasis (CMC). Prior treatments with systemic antimycotic agents (miconazole, amphotericin B) showed only little relief and were followed by immediate relapses. The initial differential diagnoses were CMC as well as other forms of chronic immunosuppression, including an underlying malignancy such as lymphoma, HIV/AIDS and tpye 1 diabetes mellitus. The initial laboratory examination revealed a positive HIV-ELISA and Western blot, a viral load of 31.000 copies/ml and a severe CD4 cell depletion (94/mm^3), leading to the diagnosis of HIV in childhood. After getting an overview about the family situation we realised that the mother had been neglecting her known HIV infection and that the little girl had never been tested before.
Conclusion Screening for HIV infection during pregnancy is the key prerequisite for the prevention of vertical HIV transmission. Testing within the first 16 weeks of pregnancy is obligatory since 2010 according to the Austrian prenatal care guidelines. This case report emphasises the importance of HIV testing during pregnancy. The younger sister of our patient had already benefitted from these guidelines because the mother had been tested positive for HIV for the first time during her third pregnancy, and mother-to-child transmission was prevented by the timely initiation of antiretroviral treatment of the maternal HIV infection.

P2.119 THE PREVALENCE OF HEARING SENSITIVITY AMONG HIV-SEROPOSITIVE AND HIV-SERONEGATIVE MEN AND WOMEN

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Background We measured the prevalence of hearing sensitivity among HIV+ and HIV- men and women and identified associated risks co-factors.
Methods Audiometric testing was conducted among 262 men [median age 54.7 years; 117 (44.7% HIV+; median (25th, 75th): nadir CD4+: 296 (191, 400); viral load (VL): 40 (40.40))] from the Baltimore-DC site of the Multicenter AIDS Cohort Study and 134 women [median age 45.2 years; 105 (78.4% HIV+; median (25th, 75th): nadir CD4+: 249 (92, 367); VL: 80 (48,1270))] from the DC site of the Women's Interagency HIV Study. Pure-tone hearing thresholds were obtained at 500, 1000, 2000, and 4000 Hz and HL was defined as a pure tone average (PTA) ≥ 20 dB hearing level in either ear. A linear mixed model with a random-subjects effect was used to account for two repeated measurements (one per ear) adjusted for age, gender, race, HIV status, and noise exposure. The HIV+ model included nadir CD4+, peak CD8+, VL, ever having AIDS, ever monotherapy (MT), ever combination therapy (CT) and ever HAART use.
Results 84 (95.2% men, 4.8% women) HIV- and 90 (65.6% men, 34.4% women) HIV+ participants had HL in the poorer ear. Age was a statistically significant risk factor of HL, however HIV status and noise exposure were not. In the HIV+ model, nadir CD4+, peak CD8+, VL, ever having AIDS, and MT were not statistically significantly associated with HL. Although there was a higher PTA and a lower PTA with ever CT and HAART use neither was significantly associated with HL.
Conclusions We found no impact of HIV status or treatment variables on HL. HIV-infected individuals who used HAART had a lower PTA, an indicator of better hearing sensitivity. However, due to cross-sectional design of this study, it is not known whether HAART use protects hearing sensitivity.

P2.120 INCIDENCE AND RISK FACTORS OF HERPES ZOSTER AMONG HIV-POSITIVE PATIENTS IN THE COHORT OF THE GERMAN COMPETENCE NETWORK FOR HIV/AIDS (KOMPNET)

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Background HIV infection is a risk factor for development of Herpes Zoster (HZ) and its complications. There is limited evidence on the impact of antiretroviral therapy (ART) on the occurrence of HZ among HIV-infected adults.

Methods Study population was drawn from the KompNet HIV cohort. Inclusion criteria were: age ≥ 18 years, record of HIV diagnosis date (t0), record of CD4 count available ± 6 months from t0. Patients without month of HZ diagnoses were excluded. Study period was 1.1.1985–1.7.2010.

Incidences of all HZ events were estimated assuming Poisson distribution, uni-/multivariate Cox proportional Hazard ratio (HR) regression models were fitted to identify risk factors for a first HZ event. Independent variables were: sex, age at HIV diagnosis, HIV transmission route, ART status, CD4-value before HZ episode, immunosuppressive medication, mode of data documentation (retrospective/prospective).

Results Study population comprised 3,757 subjects (86% male, 66% MSM, 3% IVDU, 92% Caucasian), mean age at HIV diagnosis was 38 years, mean observation time was 5.8 years.

362 HZ events were recorded in 326 patients (8.6%), resulting in an HZ incidence of 16.7/1,000 PY overall and 16.1/1,000 PY for first HZ cases. Main risk factors associated with first HZ event were: no ART compared to an ART containing a non-nucleoside reverse-transcriptase inhibitor (NNRTI vs no ART; HR 0.530, $p < 0.001$) or a protease inhibitor (PI vs no ART; HR 0.624, $p = 0.004$), lower CD4-cell count (rise 100 cells/μl, HR 0.918, $p = 0.001$) and retrospective data documentation (HR 0.582, $p < 0.001$). No risk factors were: sex, age, HIV transmission route, immunosuppressive medication.

Conclusions According to former studies incidence of HZ in HIV-infected individuals was ~5 times higher than in the general population. Our study showed ART as important protective associated factor for HZ events. Reasons may be earlier HIV-diagnosis, more recent picturing of ART, and low IVDU proportion in our study.

P2.121 EARLY PRESENTATIONS OF KAPOSI'S SARCOMA IN HIV-INFECTED PERSONS WHICH WERE UNAWARE OF THEIR STATUS

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Introduction and Objectives Kaposi's sarcoma (KS) may be the first clinical indicator of AIDS; nevertheless there are no studies of KS features concerning HIV in Ukraine. So the aim was to study epidemiological and clinical peculiarities of KS in HIV-infected persons.

Materials & methods We were studying 176 HIV-positive patients with various skin manifestations: 90 females and 86 males aged 18–71 (mean 28.8±8.7) years. Serological status (New Low Blot - Bio-Radium) and clinical stage of the infection (CD3, CD4, CD8, CD16, and CD20 count - Becton Dickinson - USA) were determined according to WHO guidelines (2006).

Results Kaposi's sarcoma was determined in 27 (15.3%) patients: 13 (7.3%) patients with Kaposi's sarcoma were classified to be at clinical stage 3 of HIV infection, and 14 (8.0%) patients - at stage 4. The lesions were localised on the face, neck, mouth, hand and legs. Skin biopsies were compatible with Kaposi's sarcoma. The CD4 count was 200–350 cells/mm^3. None of 27 patients with Kaposi's sarcoma knew about his or her HIV status. They first visited dermatologist or cosmetologist. Some of them underwent cosmetic procedures (tattoo, piercing) during last five years. All of them had one another dermatosis or more: seborrhea (16 patients), mycosis (9), and herpes or papilloma virus infections (9). Patients were receiving ARV therapy and were on regular clinic surveillance.

Conclusions Kaposi's sarcoma lesions are often observed in untreated unaware immunocompromised HIV-infected patients, and may be the first clinical manifestation of AIDS. Clinical features of Kaposi's sarcoma should be the choice of the first examination in dermatological practise.

P2.122 HIV IS AN INDEPENDENT PREDICTOR OF AORTIC PULSE WAVE VELOCITY

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Background Patients with HIV infection are at increased risk of cardiovascular events. Many potential causes have been proposed, including immunodeficiency, chronic immune activation and traditional cardiovascular risk factors. However, metabolic and anthropometric abnormalities associated with HIV and antiretroviral therapy are likely to play an important role in cardiovascular disease development. These metabolic abnormalities are similar to the metabolic syndrome (MS), an established risk factor for cardiovascular mortality.

This study aimed to investigate the relationship between HIV infection and a surrogate measure of cardiovascular risk and compare this to the risk associated with metabolic syndrome.

Methods 90 patients with HIV and 113 without HIV underwent magnetic resonance imaging to determine aortic pulse wave velocity (PWV), a clinical measure of aortic stiffness, predictive of cardiovascular mortality. Subjects were divided into 4 groups: (1) HIV-ve/MS-ve, (2) HIV-ve/MS+ve, (3) HIV+ve/MS-ve and (4)HIV+ve/MS+ve.

Results Aortic PWV was 16% higher in the HIV+ve/MS-ve group when compared to HIV-ve/MS-ve (6.2 ± 1.9 vs 5.4 ± 1.0m/s, $p = 0.008$) and similar to that observed in the HIV-ve/MS+ve group (6.2 ± 1.9 vs 6.3 ± 1.7 m/s, $p > 0.99$). The HIV+ve/MS+ve group had 38% higher PWV than HIV-ve/MS-ve group ($p < 0.001$) and 19% higher PWV than HIV+ve/MS-ve subjects ($p = 0.049$). On multivariable regression age ($b = 0.07$, $p < 0.001$), systolic blood pressure ($b = 0.02$, $p = 0.02$) and treated HIV infection ($b = 0.62$, $p = 0.01$) were all independent predictors of aortic PWV (overall $R2 = 0.34$, $p < 0.001$).

Conclusion Treated HIV infection is associated with increased aortic stiffness. The magnitude of this effect of treated HIV is similar to that observed with the metabolic syndrome. Furthermore HIV and MS are additive in their detrimental effects on vascular function.

P2.123 OCULAR MANIFESTATIONS DURING HIV INFECTION IN BUKAVU, D.R.CONGO

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Background In our area, there are little data about ocular manifestations of HIV infection. This study aims to determine the prevalence of these manifestations in Bukavu, D.R.Congo.

Methods We conducted a prospective study in three large hospitals in the city of Bukavu in South Kivu, Eastern Democratic Republic of Congo, including the Provincial General Hospital of Bukavu, Panzi General Referral Hospital and General Referral Hospital of Kadutu, from March 2012 to February 2013. All HIV-positive patients with an available CD4 count were examined at the ophthalmology unit, we included from them, patients without refractive error.

Results Of 80 patients examined, 71 were selected including 49 women (69%) and 22 men (31%).