Generalized borreliosis with CNS and joints involvement was diagnosed.

Case 3: A 31 years old woman presented severe pain. NCS=8 points in anterior femoral region. No tick bite was noticed. EM was recognized. Analgesic treatment did not cause any alleviation of pain. Physical examination showed skin paresthesia corresponding to region of pain. The antibodies against B.b. were detected in serum, confirmed by W.b. assay. Femoral nerve radiculopathy in course of neuroborreliosis was diagnosed. All patients were treated with antibiotics: ceftriaxone.

Conclusion: In cases, when pathomechanism of pain is difficult to understand, neuroborreliosis should be included as one of differential diagnosis. The real diagnosis and treatment result in complete withdrawal of pain and other clinical symptoms.

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HIV: Opportunistic Infections & Malignancies (Poster Presentation)

78.001

The emerging of non-AIDS related neoplasms in the era of combined antiretroviral therapy

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Background: The introduction of combined antiretroviral therapy (cART) since the year 1996, contributed to a rapid, significant drop of frequency of all AIDS-defining opportunistic infections and some selected AIDS-related tumors (like Kaposi's sarcoma), with a consequent, remarkable reduction of morbidity and mortality rates associated with these disease complications.

Methods: Our cohort of over 1,700 HIV-infected patients followed in two connected outpatient centres by the same physician staff were prospectively followed since the year 2000 (9 years), with special interest focused on the diagnosis, treatment and outcome of non-AIDS related malignancies.

Results: Among hematological malignancies other than non-Hodgkin's lymphoma and primary central nervous system lymphoma, we observed three cases of acute myelogenic leukaemia and 4 episodes of Hodgkin's lymphoma. A greater number of solid tumors involved different organs and sites: laryngeal cancer (8 cases, with 6 episodes of papillomatous laryngeal cancer), rhinopharyngeal squamous carcinoma (4 cases), adenocarcinoma of the lung (6 cases), gastric adenocarcinoma (3 episodes), esophageal carcinoma (2 patients), prostate cancer (4 cases), bladder adenocarcinoma (3 episodes) pancreatic adenocarcinoma (2 cases), and squamous anal carcinoma (2 episodes). Some of these malignancies have been reported with extremely rare frequency until now (usually as single-case anecdotal reports), in particular before the cART era. The patient's age ranged from 34 to 67 years, the mortality rate of these episodes was very elevated (over 80%), and occurred 3-41 months after diagnosis, despite appropriate surgical and/or cytotoxic chemotherapy and/or radiotherapy.

Conclusion: The significantly increased life expectancy of HIV infected patients in the cART era was characterized by a proportionally increase of non-AIDS-defining tumors, which may depend on the advanced mean patients' age, their prolonged exposure to risk factor, the persisting functional immune system imbalance, and probably some direct oncogenic property of HIV itself, even when a "quantitative" recovery of CD4+ lymphocyte count has been achieved thanks to cART. The differential diagnosis of non-AIDS-associated tumors may be delayed by the low clinical suspicion, and their frequency to mimick and/or overlap infectious complications. Further epidemiological and clinical investigation is strongly warranted, to increase the awareness of this emerging phenomenon.

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78.002

The role of the tuberculosis in outcome and treatment failure in HIV-infected Cambodian children

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Background: Tuberculosis and AIDS are considered to be a "deadly synergy" among HIV-infected children in Southeast Asia and sub-Saharan Africa.

Methods: We have assessed a cohort of 118 HIV-infected children, 72 of them receive antiretroviral therapy (HAART) for an average of 38 months (12-63 months), for the prevalence of tuberculosis, anti-tuberculosis therapy, immune response to HAART and coincidence of other opportunistic infections. Table 1 shows a cohort of 40 HIV-infected children with tuberculosis (36 pulmonary and 4 extrapolmonary) compared to 32 HIV—infected children without tuberculosis but with AIDS and other opportunistic infections.

Results: Children with tuberculosis were significantly younger (P<0.01) (7.8 vs. 12.8 years) and had significantly lower CD4 absolute count (180 vs. 302) in comparison to HIV-infected children without tuberculosis. Immune category 3 (82.5% vs. 59.4%, P<0.05) and CDC category C (45% vs. 9.4%, P<0.001) were also more frequently observed among HIV-infected children with tuberculosis.

Proportion of deaths (3 children within 5 years within 72 children on HAART) or treatment failure on 1-st line HAART (6 children) was similar in both groups of children (with tuberculosis and without tuberculosis). Frequency of opportunistic infections (more than 5 per year) among tuberculosis children cohort was also higher among tuberculosis HIV-infected children (70% vs. 21.9%, P<0.001). Otitis media (55% vs. 31.1%, P<0.05), oopharyngeal candidiasis (45% vs. 21.9%, P<0.04), Immune reconstruction syndrome (IRS) (40% vs. 12.5%, P<0.001) occurred significantly more frequently in HIV-infected children with tuberculosis in comparison to children without tuberculosis. Anti tuberculosis treatment (isoniazide + Rifampin + Pyrazinamid) was given 4-8 weeks before onset of HAART (lamivudine + didanosin + efavirenz), to decrease the probability of IRS. Most children received 6 months treatment with Isoniazide + Rifampin + Pyrazinamid (60%) or Ethambutol (40% children older than 10 years), 7-9
months received 30% of children and 10 – 12 months 20% of children (extrapulmonary tuberculosis or treatment failure).

Conclusion: In conclusion, occurrence of several opportunistic infections decreased absolute CD4 count, immune reconstruction syndrome, younger age, severe anaemia, more than 5 opportunistic infections within 6 months, CDC category C and immune stage 3 were significantly associated with tuberculosis in HIV-infected children.

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78.003
AIDS-associated mycobacterial infections in a large urban hospital during the HAART era (2003-2006)
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Background: Mycobacterial infections in HIV are well recognized. The aim of this study is to describe mycobacterial infections in HIV positive patients in a large urban setting with a large immigrant population in the HAART era by assessing mycobacterial species prevalence, clinical parameters, radiological findings, and survival rates.

Methods: All mycobacterial cultures reported positive at Los Angeles County-University of Southern California Hospital from 2003 to 2006 were reviewed and their respective clinical charts analyzed. This descriptive retrospective study was approved by our local Institutional Review Board.

Results: From 2003 to 2006, 965 mycobacterial isolates were obtained from 814 patients. Of these, 201 (25%) of the patients were HIV positive and accounted for 262 (27%) of the isolates. The average age of the patients was 42 years and the male:female ratio was 166:35. 65% of the patients' country of origin was outside the United States. The mean CD4 count was 137 cells/mm3 and approximately 25% of patients were receiving antiretrovirals at the time of mycobacterial diagnosis. Of the HIV positive isolates, 30% were Mycobacterium tuberculosis and 70% were non-tuberculosis mycobacterial infections [Mycobacterium avium (39%), M. flavascens (1%), M. fortuitum (11%), M. gordonae (12%), M. kansasii (3%), M. simiae (2%), M. terrae (0.8%), and M. xenopi (0.4%)].

For the Mycobacterium tuberculosis and the non-tuberculous mycobacteria, the body sites from which the isolates were obtained included pulmonary (64% and 80%), gastrointestinal (10% and 7%), skin/soft tissue (18% and 4%), hematologic (1% and 8%), central nervous system (5% and 0.5%) and genitourinary (1% and 0.5%) respectively. 83% of all patients had abnormal chest radiographs. 3% of the M. tuberculosis isolates were multidrug resistant. The survival rate of patients was 91% at 6 months, and 49 of the patients were lost to follow up.

Conclusion: Unlike previous studies that report M. tuberculosis species as the predominate strain in AIDS-associated infections our survey demonstrated that Mycobacterium avium infections are the most common. This has clinical implications when treating AIDS patients with a positive acid-fast culture as the identification of the specimen is made.

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78.004
A prospective cohort study of immunologic and virologic outcomes in patients with HIV/AIDS and hepatitis virus co-infection in Jos, Nigeria
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Background: In the era of highly active antiretroviral therapy (HAART), hepatitis B and C virus (HBV and HCV) co-infection have emerged as significant co-morbid conditions. Local reports indicate that co-infection is not uncommon in Nigeria as in other sub-Saharan African countries. Whether treatment outcomes of HIV mono-infected patients differ from those with co-infection remains largely unknown. We hypothesised that co-infected patients will have lower CD4 count recovery and viral load reduction following HAART.

Methods: A cohort study in antiretroviral therapy-naive HIV-infected adults involving 150 cases (HIV and hepatitis co-infection) and 150 controls (HIV infection only). Patients’ care was according to the National guidelines and patients received first line therapy mostly comprising Lamivudine, Stavudine and Nevirapine. Additionally, abdominal ultrasound and prothrombin time tests were done when necessary. Medication adherence was monitored using pharmacy log system, and CD4+ cell counts and HIV viral load (VL) were compared at baseline, 3 and 6 months of therapy.

Results: There were 98 (65.3%) and 96 (64%) female cases and controls (p=0.79) respectively. The mean ages of cases and controls were 38±8.4 and 37±8.9 years (p=0.20) respectively. Cases comprised 73 (48%) HBV, 70 (47%) HCV and 7 (5%) with HBV plus HCV infection. Medication adherence was >95% in both arms. Attrition rate was 2.7%; seven of these were co-infected. Five cases (3.3%) compared to zero controls developed clinical hepatitis. The proportions of patients with CD4+ count <200 cells/l among cases and controls were 111 (74%) and 109 (72%), p=0.36 at baseline; 66 (45.5%) and 64 (42.7%), p=0.21 at 3 months; 60 (42%) and 56 (37.6%), p=0.40 at 6 months respectively. Significantly, more controls (60.7%) had CD4+ increases ≥50 cells/μl at 3 months compared to 37 (54.5%) HCV+ cases (p=0.03). No significant difference in CD4+ counts between controls and cases at 6 months. The baseline median VL for cases and controls were log104.95 and log104.83 (p=0.17) respectively. The proportions of cases and controls with undetectable VL at 3 and 6 months were 96 (66.2%) and 97 (65.5%); p=0.74, and 116 (81.1%) and 97 (79.3%); p=0.10 respectively.

Conclusion: Co-infection has limited impact on immunologic and virologic outcomes, but may be an important cause of hepatotoxicity.

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