

**P24****Correlations between Proviral HTLV-2 Genetic Diversity and Patient Susceptibility to Pneumonia.**

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**Background:** One possible outcome of infection with HTLV-2 is increased susceptibility to pneumonia. Here we tested the hypothesis that genetic differences in proviral DNA could be related to pneumonia risk.

**Methods:** Proviral DNA samples from PBMCs were obtained from 62 HTLV-2 positive individuals including 31 pneumonia cases and 31 controls matched on age, sex and race from a case control study of HTLV-2 and pneumonia among injection drug users. Proviral genetic diversity was assayed by non-nested PCR using primers optimized for 4 regions sampled from the LTR, and env and tax genes.

**Results:** Patterns of viral genetic diversity and evolution were examined within and between individuals in both controls and pneumonia cases. Preliminary results suggest 1) differential variation in genetic diversity may be linked with pneumonia status and 2) the magnitude of change in genetic diversity is not uniform among all gene regions sampled within an individual

**Conclusions:** The feasibility of using specific regions within the viral genome as genetic signals for increase susceptibility to opportunistic infection by HTLV-2 infected individuals are presented.

**P25****Characterization of HTLV-I Seroprevalence in a Population of Individuals with Antibodies to Hepatitis C Virus.**

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**Background:** This study characterized the seroprevalence of HTLV-I infection in Japanese individuals with antibodies to hepatitis C virus (anti-HCV).

**Methods:** A cohort of anti-HCV-positive adult residents of a town in Japan was assembled for prospective analyses. The prevalence of HTLV-I was examined according to demographic factors and markers of HCV and hepatitis B virus (HBV) infections.

**Results:** HTLV-I infection was detected in 128 of 694 anti-HCV-positive residents, for an overall seroprevalence of 18.4%. HTLV-I-seropositive subjects were more likely to be female than were HTLV-I-seronegative subjects (70% vs. 61%;  $p = 0.03$ ). Among women HTLV-I seroprevalence increased linearly with age ( $p$ -value for trend = 0.0004), while among men the seroprevalence increased until age 60 and then remained

stable. Detection of HCV RNA did not differ by HTLV-I serostatus. However, HCV RNA-positive individuals coinfecting with HTLV-I had a lower median HCV antigen load than those without HTLV-I ( $p = 0.14$ ). The prevalence of antibodies to the HBV core antigen was similar among subjects with and without HTLV-I.

**Conclusions:** This population of anti-HCV-positive individuals was found to have a high prevalence of HTLV-I infection. The HTLV-I seroprevalence showed a relationship with age and gender similar to that observed in other Japanese populations endemic for HTLV-I infection.

**P26****Maternal HTLV-I Status Is Not Associated with Adverse Pregnancy Outcomes or Early Childhood Mortality in Jamaica.**

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**Background:** HTLV-I infected pregnant women are known to transmit infection to approximately 20% of their offspring. However, the effects of maternal HTLV-I infection on pregnancy outcomes and childhood mortality have not been well described.

**Methods:** A nested case-control study of adverse pregnancy outcomes was conducted among 357 pregnant women who attended antenatal clinics in Kingston Jamaica between 1989 and 1990, and included 210 HTLV-I(+) and 147 HTLV-I(-) women. Analysis of childhood mortality was limited to the 308 children who attended at least one clinic visit.

**Results:** HTLV-I status of pregnant women was not significantly associated with an adverse outcome of their enrollment pregnancy, including stillbirth ( $p = 0.23$ ), breech birth ( $p = 0.11$ ), low birth weight ( $p = 0.22$ ) or premature birth ( $p = 0.87$ ), after removing twin births from the analysis. Additionally, HTLV-I status of pregnant women was not associated with a significantly increased risk of ever having an adverse outcome of a historical pregnancy (OR = 1.3, CI = 0.7-2.4), after adjustment for maternal age, transfusion history and beta-carotene levels at enrollment. Four early childhood deaths occurred, however mortality was not associated with maternal HTLV-I status ( $P = 1.0$ ).

**Conclusions:** Maternal HTLV-I status does not appear to be associated with adverse pregnancy outcomes or early childhood mortality. Our results support a previous report of no effect of maternal HTLV-I status on pregnancy outcomes, and suggest no effect of maternal HTLV-I status on early childhood mortality.

**P27****HTLV-I and II in Blood Donors in England and Wales: The Experience so Far.**

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