

We aim at evaluating the efficacy of HAART and the prognosis of AIDS patients in Tianjin.

Methods: (1) 62 naive AIDS patients were enrolled and were randomly divided into HAART group (n=45) and contrast group (n=17). (2) AIDS patients in HAART group were initially treated on first-line antiretroviral (ARV) drugs, AZT/D4T+3TC+NVP/EFV. (3) Observing the two groups of patients on clinical manifestations, changes in immune function and prognosis.

Results: (1) The baseline CD4 cell counts had no significant difference between two groups of patients ($P>0.05$). In HAART group, the median of CD4 cell was 73/ul (n=45) before HAART was introduced. And after 3, 6, 12 month of HAART initiation, the median of CD4 cell was respectively 120/ul (n=39), 139.5/ul (n=30) and 200/ul (n=22). (2) The incidence of OIs/cancers and mortality of patients in HAART group was 40% and 4.44%, which were obviously lower than contrast group, 88.24% and 47.06% ($p<0.01$). (3) 95.55% (43/45) naive patients take effect on first-line HAART but 17.78% (8/45) patients adjust drug regime as side effect.

Conclusions: Tianjin AIDS patients show a good effect on first-line HAART. Along with the extension of HAART period, the Immune function of patients was gradually restored and prognosis was significantly improved.

PP-157 Risky sexual behaviors among young urban females in post-conflict Liberia

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Objectives. Liberia, a country west of Sub-Saharan Africa, has not escaped the massive and terrible effect of this HIV/AIDS epidemic, especially among vulnerable populations like young females. Data regarding the HIV/AIDS risk behaviors of youth Liberian females have been relatively unavailable. In the presentation, we characterized the HIV/AIDS risk behaviors of young urban Liberian females and propose intervention strategies to mitigate the spread of the virus among this population.

Method. The study method is a community-based randomized controlled trial (RCT) in Monrovia, Liberia. Study participants were randomly assigned to either a behavioral-driven HIV/AIDS prevention program or a general health program, administer a 8-session program, and followed for up to 12 months to determine the efficacy of the HIV/AIDS program.

Results. Young urban Liberian females are at high risk for HIV/AIDS. For example, they are less likely to use condoms, more likely to have multiple sexual partners, and less likely to be knowledgeable about HIV/STDs. Strikingly, gender inequalities and socio-economic disparities are major contributing factors.

Conclusion. We conclude that the findings from this study has the potentially to contribute to the research and policy gaps associated with risky sexual behaviors among young urban females in post-conflict Liberia.

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PP-158 Development of HIV-1 laboratory diagnostic assay based on the multiplex PCR

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Objective: To establish an HIV-1 diagnosis assay with multiplex PCR.

Method: Three sets of primers directed towards HIV-1 genome region gag, pol and gp41 were used to establish an nPCR and RT-PCR, and also established a multiplex PCR detection system. Testing was conducted on 150 HIV seropositive and 50 seronegative patients; sensitivity and specificity were calculated. Separately, parallel testing of 73 positive samples using the created PCR method and NASBA method was conducted to compare the two tests' sensitivity. Testing of 10 positive samples of various viral load was repeated 3 times, to calculate test reproducibility. DNA from 43 positive samples underwent subtype identification.

Results: The nPCR and RT-PCR assay systems showed sensitivities of 98.0% (147/150) and 91.3% (137/150) respectively with a specificity of 100% for both systems. Single tube and multi-tube PCR diagnostic method results showed high concordance (nPCR Kappa=0.961, P=0.022; RT-PCR Kappa= 0.977, P = 0.016). nPCR exhibited a markedly higher sensitivity than NASBA, 97.3% vs. 72.6%, ($\chi^2=17.34$, $p=0.000$). RT-PCR has a not significant higher sensitivity than NASBA, 79.5% VS 72.6%, ($\chi^2=0.94$, $p=0.332$). The repeatability of nPCR and RT-PCR was 96.7% (29/30) and 93.3% (27/30) respectively. The 43 DNA samples belong to subtype B' (37 cases), AE subtype (5 cases) and BC subtype (1 case).

Conclusion: We have developed a HIV-1 multiplex PCR diagnostic assay that is simple, sensitive, economical, and reproducible.

Poster Presentation – Paediatrics

PP-159 Clinical study of children with cytomegalovirus hepatitis

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Objectives: To summarize the clinical characteristics of cytomegalovirus hepatitis in infants and young children.

Methods: Clinical data of 15 children who suffered from cytomegalovirus hepatitis were retrospectively analyzed, and were compared with 30 adults with cytomegalovirus hepatitis.

Results: Among 15 children with a mean age of 27.5 ± 24.6 months who were healthy before, 12 cases displayed acute hepatitis, 2 patients displayed severe hepatitis, and only one displayed chronic hepatitis. The most frequently associated symptoms were poor appetite (93.3%), vomiting (86.7%), jaundice (86.7%), fever (66.7%), splenohepatomegalia (60.0%). 9 cases associated with myocardial damage and pneumonia. We detected cellular immune function of 11 children and found the CD4⁺ T lymphocyte count decreased in 8 cases. 28 cases in adults group displayed acute hepatitis, 2 patients displayed chronic hepatitis, and no one had severe hepatitis. 4 cases had underlying disease (diabetes, tuberculosis etc), 3 had taken corticoid for a long time, and the CD4⁺ T lymphocyte count decreased in 10 adults. The median of total bilirubin in children (165.5 μ mol/l) is much higher than that of adults (26.6 μ mol/l). All children were given ganciclovir and recovered, including 2 severe hepatitis cases.

Conclusion: Most of children with cytomegalovirus hepatitis have higher total bilirubin level than adults. A few children display hepatic failure or chronicity tendency.

PP-160 The prevalence of plasmid-mediated quinolone resistance determinants among clinical isolates of ESBL or AmpC-producing *Escherichia coli* from Chinese pediatric patients

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Objective: The aim of this study is to investigate the plasmid-mediated quinolone resistance (PMQR) determinants (*qnr*-like, *aac(6')-Ib-cr*, *qepA* genes) and the relationship between PMQR and ESBL or AmpC -encoding genes in ESBL or AmpC-producing *Escherichia coli* from Chinese pediatric patients.