

**355** Vertical transmission of AIDS. H.Mano, J.C.Chermann\*, Department of Obstetrics and Gynecology, Nagoya University School of Medicine, Aichi, \*Unite de recherche sur retrovirus et maladies associees INSERM, Marseille, FRANCE.

To elucidate vertical transmission of AIDS, human immunodeficiency virus 1 (HIV-1) infection in utero was examined by isolating HIV-1 and detecting the HIV-1 DNA sequence from different fetal tissues. The brain, thymus, lung, liver, spleen and placenta tissues from fetuses (10-23 week of gestation) born to HIV-1 infected asymptomatic mothers were examined. HIV-1 was isolated from 2/7, 1/7 and 1/7 co-cultures of splenic, thymic and trypsin-resistant cells from the liver and placenta respectively with HIV-1 uninfected peripheral blood mononuclear cells. Splenic and thymic cells and trypsin-resistant cells were mainly lymphoid cells and macrophages respectively. In addition the HIV-1 DNA sequence was detected in 4/7, 3/7, 1/7, 1/7, 2/7 and 2/6 samples from the spleen, thymus, brain, lung, liver and placenta respectively using the polymerase chain reaction. We indicate that fetal HIV-1 infection may frequently occur transplacentally in the second trimester and the cells responsible for the infection may be lymphoid cells and macrophages.

**356** Anti C100-3 antibody and mother-to-infant transmission of hepatitis C virus. M.Ishida, Y.Misawa, Dept. Obst. and Gynec. Shirone Kensei Hosp., Niigata.

There are a few case reports which refer to the existence of mother-to-infant transmission of hepatitis C virus (HCV), but the real condition of the vertical infection of HCV have not yet been made clear. This time, we analyzed the anti HCV antibody (anti C100-3 antibody) of 302 pregnant women using their stored serum, and when anti C100-3 antibody was positive we analyzed the same antibody of the infant. The assay of the antibody was performed with the kit: Ortho HCV Ab ELISA test. Anti C100-3 antibody was positive in 3 of the 302 pregnant women (0.99%). Of these 3 cases one had experienced post transfusional hepatitis. The other two did not have such history. The infants of these 3 cases were also analyzed about anti C100-3 antibody. One of these infants was born at 24 weeks gestation and died one month after birth, then only the cord blood was analyzed in this case. The antibody of this cord blood was negative. The other two infants are now about two years old and the antibody has been negative. The follow up study is now continued. At present, it is suggested that the mother-to-infant transmission of HCV may be rare when anti C100-3-antibody is used as the marker of the HCV infection.

**357** The frequency of hepatitis C virus antibodies in pregnant women and possible transmission of hepatitis C virus. T.Kojima, T.Yokomizo, S.Tsutsumi, Dept. Obstet. and Gynec., Yaizu Municipal Hosp., Shizuoka.

An ELISA (Ortho Diagnostic Systems) was used to detect antibodies to hepatitis C virus (anti-HCV) in 594 pregnant women without any clinical evidence of liver disease, and 21 members of the positive women's families were also tested. Seven of the 597 (1.18%) had anti-HCV and 587 (98.82%) were negative. The mean  $\pm$  SD of the cut-off index for anti-HCV-negative and -positive pregnant women was  $0.0535 \pm 0.0306$  (range: 0.006-0.165) and  $3.030 \pm 2.084$  (range: 1.219-6.269), respectively. None of the anti-HCV-positive pregnant women had any history of blood transfusion, abnormal liver function tests, HAV-Ab, HBs-Ag, HBs-Ab, HBe-Ab, or HDV-Ab, except for one positive for HBe-Ab. One child born to an anti-HCV-positive mother was positive for anti-HCV at birth but became negative at 4 months of age. All four infants between 1 and 3 years of age born to anti-HCV-positive mothers were negative for anti-HCV and had normal ALT levels. Vertical transmission of hepatitis C was not found. However, the intra-familial positive rate of anti-HCV was 9.5% (2/21), and was significantly high ( $p < 0.05$ ). Both parents of one family were positive for anti-HCV but had normal ALT levels. The father had a history of blood transfusion. Thus, intra-familial transmission of hepatitis C virus was detected.