

CFP10 (25 µg/mL); A2,A3 negative controls consisted of cells cultured with medium alone; B2,B3 positive controls consisted of cells cultured with Con A (25 µg/mL).

Results: The CFP-10 recombinant protein were obtained and purified, In-house ELISPOT-IFN-γ assay using recombinant CFP-10 antigen show significant high frequencies TB specific T-cell responses in patients of active TB with or without HIV infection. there was 100% consistency to the clinical manifestation, in the HIV(+) group without clinical TB disease, the rate of positive tests results was 24.7%. Our results proved that it is indeed true that some of HIV positive patient have high frequencies of TB specific T-cell responses, it could be used in diagnosis of TB diseases, and it maybe provide a clue to find latent TB infection in Chinese HIV(+) population.

OL-043 Mechanism and therapeutic efficacy of peroxisome proliferator activated receptor agonist for virus-associated hemophagocytic syndrome

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Background and Aims: Hemophagocytic syndrome (HPS) is a fatal complication of severe viral infections such as Epstein-Barr virus (EBV) and recently, SARS CoV, and H5N1 influenza. The pathogenesis of HPS is presumed to result from an enhanced proinflammatory cytokine secretion and systemic macrophage activation. Previously, we demonstrated that EBV LMP-1 can activate T-cells and upregulate tumor necrosis factor-alpha and interferon-gamma, mediated through the NFκB/ATF5/SAP/ERK signaling, to activate macrophages. Since peroxisome proliferators activated receptor (PPAR) agonists, regulators of cholesterol metabolism, have been shown to exhibit profound effects on the inhibition of proinflammatory cytokines and macrophage activation through NFκB and AP-1 signaling, we adopted a PPAR-γ agonist, rosiglitazone, for the potential therapy of HPS using a rabbit model of Herpesvirus papio (HVP, an EBV homologue)-associated HPS.

Materials and Results: In vitro, rosiglitazone was shown to inhibit macrophage activation and secretion of tumor necrosis factor-alpha (TNF-α) through inhibition of NFκB signaling in THP1 cell line. Different doses of rosiglitazone were then fed to rabbits after intravenous injection of 5×10⁷ copies of HVP virus at different time courses (7 days and 20 days, respectively) of infection. As compared to the control group which succumbed consistently at around one month, the 4mg rosiglitazone-treated group showed significant improvement of survival when fed at early stage (7 days) of infection (p<0.01), while a higher dosage (8mg) is needed to achieve therapeutic effect at advanced stage (20 days) of infection (p<0.05). The viral load, TNFα cytokine levels, and laboratory parameters also showed significant improvement in the rosiglitazone-treated group.

Conclusion: PPAR agonist, in addition to its therapeutic effect for metabolic syndrome, appears to represent a potential regimen of new concept for the control of HPS associated with severe virus infections.

OL-044 HAV seroprevalence among children with 10–24 month ages in Ulaanbaatar

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Background: HAV infection is high endemicity in Mongolia. The outbreak of acute HAV infection is regular and wide outbreak usually within 3–4 years interval. Recently, Mongolian and Japanese researchers established the seroprevalence of HAV infection in Mongolian adults almost 100%. So, there is urgently needed the HAV vaccination program in Mongolia.

Aim of study: To determine the age (month) of start for universal HAV vaccination.

Method and Subjects: In July and August 2008, there were selected 953 children ages 11–24 months from Chingiltei district, Ulaanbaatar. More 600 of them were living in the Mongolian ger (nomad's tent – less comfortable and sanitary condition than city's apartment). In all children had not manifested acute viral hepatitis. In all serum of selected children were tested anti-HAV-IgG.

Results: There was detected positive of anti-HAV in 20 children of 951. 19 of them living in ger. The table shows the results by age and sex.

Age (months)	Male		Female		Total	
	N	Anti-HAV+	N	Anti-HAV+	N	Anti-HAV+
11–12	71		59		130	0
13–14	104	2	94	2	202	4
15–16	74	1	68		143	1
17–18	70	3	58	1	132	4
19–20	57	1	57	2	117	3
21–22	57	2	48	1	108	2
23–24	77	5	59		141	5
Total	510	14	443	6	953	20

Conclusions: 1. The incidence of HAV infection occurred from 13 month's age, after wide outbreak. 2. There is recommended to start HAV vaccination for children, who living in uncomfortable hygiene condition, before 13 month's age.

OL-045 Clinical significance of beta-herpesvirus infections in HIV/AIDS and chronic fatigue syndrome patients in Latvia

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The aim of this study was to investigate the prevalence of beta-herpesvirus (HHV-6 and HHV-7) infections among the HIV/AIDS, chronic fatigue syndrome (CFS) patients in comparison with blood donors (BD).

Materials and Methods: 52 patients with HIV/AIDS, 49 CFS and 150 healthy BD were enrolled in the study. Active and latent/persistent viral infections determined by nPCR: the presence of viral genomic sequences in PBL DNA only was defined as latent/persistent infection; sequences in PBL DNA and blood plasma DNA was defined as active infection. Concurrent infection with both HHV-6 and HHV-7 was defined as simultaneous presence of both virus genomic sequences in DNA sample of patient (isolated from PBL or blood plasma).

Results: PCR analysis did not reveal a significant difference in the prevalence of latent/persistent HHV-7 infection