**Results:** RV-Ag detected in 394 (41.5%) children. 187 (47.5%) of them was children 6–11 months age. 131 of them only admitted September-October 2010.

The clinical picture of RV and non RV infection almost similar. Serious severe dehydration occurs 3%, manifested dehydration 80% of whole patients. In 60% of samples for genotype detected G2P4.

**Conclusion:** In Mongolia RV infection is wide spread among children, in particularly in children under 1 year old. Clinical picture of RV infection is similar to another acute diarrheal infection. In Mongolia mostly occurs G2P4 genotype.

## OL-076 A two year follow-up clinical study on 20 hand foot and mouth disease (HFMD) children with acute flaccid paralysis

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**Background:** To investigate the clinical characteristics and effective therapy of AFP by two years' follow-up study, 20 HFMD infants and children with AFP were enrolled in Beijing in 2008.

Methods: At acute stage and in two years' follow-up, the clinical manifestations and MRI findings were investigated. Results: Of 20 patients, 11 cases (55%) got recovery and 9 cases (45%) were left with AFP sequelae. Recovery probable came on those cases with age of less than sixmonth, a single lower limb, or the spinal cord lesions of less than one or two vertebrae levels on the waist. Joint activities obstacles, slight deformity of the joint, muscular atrophy can be seen in severe AFP sequelae cases. MRI findings at follow-up revealed that lesions were mostly unreadable which at acute stage were found in the brain stem and/or in the anterior horn of spinal cord.

**Conclusions:** 9 cases (45%) were left with AFP sequelae. Lesions of the spinal cord will lead to AFP sequela which is associated with the length of the lesions. MRI at acute stage can be helpful in the evaluation and prediction of HFMD. The early rehabilitative treatment under the guidance of experts can minimizes the possibility of AFP sequelae.

## OL-077 Comparison of clinical features of severe hand foot and mouth disease infected by Coxsackievirus and enterovirus 71

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**Objective:** To compare the clinical character of severe hand foot and mouth disease (HFMD) infected by Coxsackievirus (COX) and enterovirus 71 (EV71).

Methods: A total of 156 hospitalized patients (96 with Cox infection and 60 with EV71 infection) of severe HFMD from August 2007 to December 2010 in the third people's hospital of Nantong were enrolled in this study. Patients' demographics, clinical manifestations and results of laboratory examination for these patients were collected and compared.

**Results:** Compared with patients with EV71 infection, Patients with COX infection had a significantly longer hospitalization period, higher male ratio and lower age (P < 0.001), the maximum temperature is higher and the heart rate is faster (P < 0.005). The proportion of salivation, diarrhea, mouth ulcer is also higher (P < 0.05), while fewer cases of sleepiness symptoms or atypical rash occurred in patients with Cox infection (P < 0.05). There was no difference in Other symptoms, such as duration of fever, cough, vomiting, startle (P > 0.05). Both Cox and EV71 can cause brain stem encephalitis and

meningoencephalitis, and both of which can also occur in one patient with EV71 infection at same time (P < 0.05). The level of lactate dehydrogenase, creatine kinase, aspartate aminotransferase, blood glucose, C-reactive protein was higher in patients with Cox infection than with EV71 infection (P < 0.05), while there was no significant difference in the level of white blood cell count, neutrophil ratios, platelet, Alanine aminotransferase between patients with Cox infection and with EV71 infection (P > 0.05).

**Conclusion:** Both COX and EV71 can cause severe HFMD. The general clinical manifestation caused by COX was more serious, but the clinical manifestation of central nerve system of patients with EV71 infection was on contrary.

## OL-078 Epidemiological study and clinical analysis of 849 patients with hand foot and mouth disease

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**Background:** Hand, foot and mouth disease (HFMD) is a human syndrome caused by intestinal viruses of the Picornaviridae family. The most common strains causing HFMD are Coxsackie A virus and Enterovirus 71 (EV-71). To discuss epidemiological and clinical character of 849 patients with hand foot and mouth disease in the 1<sup>st</sup> hospital of Jilin University and to summarize the experience of the diagnosis and treatment.

Method: Epidemiological and clinical data of the hand foot and mouth disease patients was summarized and analyzed. Result: Most of the HFMD cases were children under under 5 years old (97.29%), the percentage of patients under 3 years old is 87.28%. The ratio between male and female cases was 1.43:1, the incidence rate of male was significantly higher than the female. HFMD were appeard from April to December, the peak incidence occurred in July to September. In the cases with laboratory diagnosis, EV71 accounted for 45.08%, CoxA16 accounted for 38.34%. All deaths were infected by EV71.

**Conclusion:** Prevention and control should be strengthed in the epidemic season. Early diagnosis and early treatment is necessary.

## OL-079 Clinical feature of 36 critical cases of hand foot and mouth disease

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**Objective:** To study the clinical characteristics of critical cases of hand foot and mouth disease (HFMD) in recent years

**Methods:** 36 critical cases of HFMD admitted to the Xi'an Children's Hospital and the Northwest Hospital from January 2008 to October 2010 were investigated.

Results: (1) 91.7% of the critical HFMD patients were below 3 years old and 58.3% of cases occurred in May–July. (2) 36 critical cases show clinical manifestation: 100% had rash, 97.2% had fever, 83.3% had pulmonary rales, 75% had vomiting, 47.2% had myoclonus and positive pathologic reflex, 36.1% occured shock. (3) Laboratory findings: 94.4% of patients were infected by EV71, 78.3% of cases combined influenza virus, 71.9% of patients had leucocytosis, 68.6% of patients had hyperglycaemia. In the 19 fatal cases, we found hyperglycaemia (92.9%), pulmonary edema (83.3%) and leucocytosis (81.3%).