detection of critically ill patients. Most critical care patients required mechanical ventilation and had a high case-fatality rate.

PP-072 Comparative analysis of epidemiological and clinical characteristics with mild and severe influenza A (H1N1)

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Objective: To comparatively analyze the epidemiological and clinical characteristics of patients with severe influenza A (H1N1).
Methods: The clinical data were analyzed retrospectively from September 25, 2009 to November 23, 2009. Mild patients were 33 cases and severe patients were 32 cases.
Results: Patients in the 2 groups were mainly young people. The average age of mild group was 20.5±9.5 years old vs 26.5±20.0 years old in severe group. Occupational distribution of the 2 groups was mainly young staff and students. Fever, cough, expectoration and fatigue were prominent and characteristic features of the disease. The ratio of hyperpyrexia (⩾39°C) and the duration of fever were statistically significant difference. There were no chest tightness, shortness of breath and vomiting in mild group. All patients in the 2 groups had throat congestion. No patients in mild group had complication, 24 cases in severe group had pneumonia and 8 cases had bronchial pneumonia. The ratio of abnormal of WBC count and absolute neutrophil count were statistically non-significant difference, but the abnormal of CK, LDH and liver function were statistically significant difference. All patients in severe group had abnormal chest X-ray examinations vs normal in mild group. All patients were successfully cured and discharged from hospital by oseltamivir phosphate capsules, Chinese patent medicine (Tanreqing injection) and symptomatic treatment. There were statistically significant difference of average hospital stay in the 2 groups.
Conclusion: Patients with influenza A (H1N1) are mainly young people. The complications of severe influenza A (H1N1) are pneumonia, heart damage and liver function abnormal and the process of the disease is in a extremely dangerous state. Though the ratio is declining, early detection, intensive care and active treatment should be all the same taken. Traditional Chinese medicine has comparative advantage and should be promoted.

PP-073 An analysis of the clinical features of A/H1N1 influenza infection

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Objective: To reduce stuffs and patients being infected in hospitals, the clinical features of A/H1N1 influenza infection were studied.
Methods: The clinical data of 17 patients with A/H1N1 influenza were made a retrospectively investigation in June 2009, the data included the change of body temperature, blood routine and chest X-rays check, 18 patients with ordinary influenza were studied as the control group.
Results: There were not significant difference for the change of body temperature, blood routine ($P > 0.05$). The chest X-rays check were normal in the two groups. All patients were confirmed positive for A/H1N1 RNA when they had fever, and were negative for A/H1N1 RNA when they had no fever in the A/H1N1 influenza group, those patients with ordinary influenza were all negative for A/H1N1 RNA when they had or not fever. These patients with A/H1N1 influenza or ordinary influenza had no complications, and all had good prognosis.
Conclusion: A/H1N1 influenza did not have any special clinical manifestations compared with ordinary influenza.

PP-074 Small interfering RNA (siRNA) mediated inhibition of influenza A virus replication in mammalian cell line

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Background: Influenza A virus, since time immemorial, has posed an acute worldwide threat to human health and has been the cause of frequent epidemics and reoccurring pandemics. Various RNA interference (RNAi) studies have been carried out for the RNA-mediated RNA degradation in a sequence-specific manner. NS1 gene of influenza viruses plays a crucial role in inhibiting the interferon-mediated responses in the host.
Methods: We have studied the viral replication inhibition using siRNAs targeted against the conserved regions of the NS1 gene of influenza A Virus. The NS1 gene was cloned in pSecTag 2A vector and was co-transfected with 30, 40 and 50 pmoles of the designed siRNAs in MDCK cells. The same concentrations of siRNAs were also transfected with the whole virus (Influenza A/PR/8/34) to study the inhibition of replication. RT-PCR and Real-time RT-PCR assays followed by western blot analysis were performed to detect the inhibition of the expression of NS1 gene.
Results: All the tests confirmed an increase in inhibition of the expression of NS1 gene with an increase in the concentration of siRNA. The maximum inhibition (75%) of the virus replication was observed at 50 pmoles of siRNA.
Conclusion: Our study demonstrates that siRNA is able to cleave the target RNA at simulated physiological condition in a sequence specific manner. An increase in down-regulation of the cloned NS1 gene as well as a significant protection against influenza virus infection in MDCK cells was observed with an increase in siRNA concentration from 30–50 pm. The maximum inhibition of gene expression as well as viral replication inhibition was observed at 50pm concentration of siRNA.

PP-075 Expression of neuraminidase protein of H1N1 swine-origin influenza A virus (S-OIV) in insect cells with a baculovirus expression system

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Objective: To construct the recombinant baculovirus expressing 2009 pandemic H1N1 swine-origin influenza A virus (S-OIV) Neuraminidase (NA) gene in insect cell.
Methods: The NA gene of Influenza A virus [A/California/VRDL98/2009 (H1N1)] was cloned into pGEM-T easy vector and then was ligated into baculovirus donor plasmid pFastBacHTa after cutting by *Eco*RI and *Hind* III. pFastBacHTa-NA was subsequently transformed into DH10Bac E. coli competent cells, which contained the baculovirus shuttle vector (Bacmid) and the helper plasmid to generate a recombinant bacmid. The recombinant baculovirus stock was prepared by transfecting the recombinant bacmid DNA into the Sf9 insect cell for protein expression after amplification. Sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE) and Western blotting were performed to identify the antigenicity of the recombinant protein.