

assayed by IFA. 16SrRNA genes of *A. phagcytophium* in blood samples of domestic animals were amplified by using nested PCR and genetic diversity of 16SrRNA genes were analyzed.

Results: The total positive rates of IgG antibody against *A. phagcytophium* for farmers were 34.9%. For 3 investigated counties, the positive rates were 77.4% in Guangde, 54.9% in Mingguang city and 10.3% in Huanyuan County respectively. The total seroprevalence in dogs, goats and ox were 33.3%, 0.76% and 0 respectively. Amplifying 16SrRNA gene of *A. phagcytophium* were 25.00% positive for dogs' blood samples, 0 for goats and 33.33% for ox respectively. Genetic diversity analysis showed there were two groups of *A. phagcytophium* in the study. One was classified in Guangde County and the other gathered in the north Huaiyuan County. Another clad with mixed above two variants of *A. phagcytophium* existed in Mingguang city located in the mideast of Anhui Province.

Conclusion: Prevalence of Anaplasmosis in human and domestic animals existed in Anhui Province and there are two groups of *A. phagcytophium* in these areas. Differential diagnose of zoonotic "rickettsial" infection should be emphasized in clinics.

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PP-241 Pay attention to differential diagnosis of anaplasmosis with thrombocytopenic syndrome

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Objective: Human granulocytic anaplasmosis (HGA) is emerging tick-borne rickettsial diseases (TBRD) caused by the obligate intracellular bacteria *Anaplasma phagocytophilum*. An unusual nosocomial human to human transmission of human granulocytic anaplasmosis (HGA) occurred in Anhui province in 2006. Subsequently, a pilot retrospective laboratory survey of suspected HGA cases in Shandong Provinces over 2004 to 2005 identified several cases by serology and blood PCR. In a recent investigation, a natural focus of Anaplasmosis has been confirmed in Yiyuan County, Shandong Province in 2008. In recent years, patients with fever and thrombocytopenic syndrome increased during April to October every year. In order to ensure if there're some HGA cases in the patients with fever and thrombocytopenic syndrome, we conducted clinical analysis and laboratory differential diagnoses on 42 patients with unknown febrile from Apr to Oct in 2011.

Methods: Summarize clinical features of 42 patients and collected blood samples in acute stage and recovery stage respectively. Detection of serum IgM and IgG antibodies to *A.phagocytophilum* and nested PCR amplifying 16SrRNA gene of *A.phagocytophilum* were conducted in Shandong Province CDC and China ICDC respectively.

Results: 7 cases of HGA had been confirmed. Typical clinical features for all patients were high fever (38.5°C-39.8°C), weakness, myalgia, Anorexia. No rash was observed. The WBC and platelet accounts decreased progressively after being hospitalized. Blood biochemical assay including AST and ALT showed 2-10 times elevated. 5 cases had been confirmed by serum 4 fold change. 2 cases were diagnosed through PCR. 1 patient was confirmed to be co-infection with Bunia Virus. All patients were recovered by oral administration doxycycline and symptomatic treatment.

Conclusion: There are HGA cases among the patients with fever and thrombocytopenic syndrome. Differential diagnosis of HGA and describing specific antibiotics should be noticed in clinical practice.

PP-242 Epidemiological surveys of Q fever in YiLi regions of Xinjiang Province

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Objective: Q Fever is a worldwide zoonoses caused by *Coxiella burneti*. YiLi regions locate in the northwest of Xinjiang Province which is the biggest province of China. The local residences are mainly composed of several minority nationalities including Kazakhs, Uyghur and Muslim and the livelihood of farmers and nomads also live on raising livestock and digging herbs and moving about in search of pasture are their lifestyles, which increase livelihood vulnerability and sensitive to various infectious diseases especially zoonoses. Previously data indicated that there were prevalence of Q fever in the south regions of Xinjiang Province. In order to understand seroepidemiological situation of *Coxiella burneti* in farmers and domestic animals in YiLi regions of Xinjiang Province, a field epidemiological investigation was performed during May 15 to 21, 2009.

Methods: Twenty four sera from patients with unknown febrile and eighty five from domestic animals including fifty eight goats, sixteen ox and eleven horse were obtained and IgM and IgG antibodies against *Coxiella burneti* were detected by micro-indirect immunofluorescence assays (IFA). Diagnose reagents were purchased from Focus Company.

Results: Four cases of acute Q fever and two cases with chronic Q fever or convalescence were diagnosed. For animals, 75.44% goats were positive for IgM I phase antibody and 57.89% goats were positive for I phase IgG antibody. Ten goats with acute infection by *Coxiella burneti* and two goats with chronic infection were identified.

Conclusion: Prevalence of Q fever in farmers and nomads and domestic animals were demonstrated in YiLi regions of Xinjiang Province. Further and broad epidemiological surveys and necessary prevention and control methods should be conducted in these regions. Differential diagnose of unknown febrile patients in clinics should be emphasized.

PP-243 Divergence of *Anaplasma* isolates from domestic animals in YiLi regions of Xinjiang Province, China

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Objective: In order to investigation the epidemiological situation of *A. phagocytophium* in health population and animals including goats, ox, horses, marmota, red deer and *Citellus undulates* in YiLi regions, Xinjiang Province.

Methods: Using micro indirect immunofluorescence assay (mIFA), IgM and IgG antibody against *A. phagocytophium* were detected for sera from local healthy people and animals. Nested PCR targeted for 16SrRNA gene of *A. phagocytophium* were used to test blood DNA from human and animals. Divergence of sequences of *A. phagocytophium* 16SrRNA genes from domestic animals was analyzed.

Results: The positive rates of IgG antibody against to *A. phagocytophium* in healthy population and goats, ox

and horse were 5.3%, 6.9%, 6.3% and 9.1% respectively. For PCR test, the potential infection rates of goats, ox and horse were 38.9%, 37.5% and 36.4% respectively. There were significant divergence of *A. phagocytophium* isolates in this study and Homology analysis showed that they were broadly distributed in other regions of China and other countries around China.

Conclusion: Infection of *A. phagocytophium* in domestic animals and human existed in Yili areas of Xinjiang Province. Differential diagnoses of unknown febrile patients should be emphasized in clinics and further investigation of ecological characterization of Anaplasmoses including its vectors and hosts should be practiced.

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PP-244 Practice of platelet transfusion in febrile thrombocytopenia during dengue outbreak 2010 in Rawalpindi, Pakistan

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Objective/Background: To analyze the practice of platelet transfusions which is the standard clinical practice adopted in many dengue-endemic countries.

Methods: This retrospective study included 500 patients admitted in the isolation ward of Holy family Hospital, a public tertiary care hospital, presenting with acute febrile illness during a dengue outbreak. Only patients who fulfilled the WHO criteria for acute dengue (fever and +2 of the following symptoms: headache, eye pain, myalgia, arthralgia, leukopenia, rash, and bleeding) were included.

Results: 500 patients were admitted with a suspected diagnosis of DF. Among these, 7% patients were confirmed by positive serology to have the disease. The common symptoms were fever (100%), bleeding (58%) and aches (47.5%). 98% had a platelet count below 100,000/ μ l. Bleeding occurred in 40.7% cases with thrombocytopenia between 25,000/ μ l to 50,000/ μ l. Rash was observed in 14% of patients with thrombocytopenia. Platelet Transfusion was done in 55.4% of febrile thrombocytopenia patients. 41.1% of those who received transfusion had a platelet count between 10,000/ μ l to 25,000/ μ l. The following are the reason for platelet transfusion: Bleeding (52.2%), Platelet count \leq 10,000/ μ l (27.2%) Rash (5.9%) and others (14.7%).

Conclusion: The strategy of platelet transfusion is based on bleeding and thrombocytopenia. This practice exposes patients to unwarranted risk and results in increasing cost of treatment of dengue fever, which can be reduced by avoiding unnecessary platelet transfusion.

PP-245 The clinical characteristics and epidemiological features of 30 dengue fever cases from a local outbreak in Dongguan City Southern China

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Objectives: To analyze the clinical characteristics and possible origin of the local outbreak of dengue fever in Dongguan City, Guangdong, China, in September 2010.

Methods: The clinical data and serum samples of 30 patients with dengue fever were collected from the local hospitals.

The patients infected with dengue virus (DENV) were confirmed by laboratory tests. And the epidemiological data were collected from site investigation and local Center for Disease Control and Prevention.

Results: It was the first time to report the outbreak of Dengue fever in Dongguan city in recent 6 decades. The mean age of 30 patients with dengue fever was 38 ± 15.5 (range from 7 to 80) years. The main clinical manifestations were fever (100%), myalgia (76.7%), headache (63.3%), rash (56.7%), leucopenia (86.7%), low platelet count (66.7%), elevated alanine aminotransferase (67.9%) and aspartate aminotransferase (96.4%) etc. The first case was confirmed by laboratory diagnosis with a positive IgM and IgG antibody against DENV with similar symptoms described as above and he had returned back to Dongguan from a trip to Singapore and Malaysia on July 13, 2010, other cases gradually surfaced in the same community, from August 23, 2010 to September 18, 2010. The RT-PCR of the virus RNA and sequencing showed that it was a DENV-I strain virus and the E protein gene shares 99% homology to the strain identified in Malaysia in 2005.

Conclusion: 30 patients identified in Dongguan City were typical dengue fever without clinical type of dengue hemorrhagic fever or dengue shock symptom. All of them were discharged from the local hospitals with good condition. And this local outbreak of dengue fever was initiated by an imported case traveling back from Singapore and Malaysia.

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PP-246 An outbreak of dengue in central Nepal, 2010

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Background: Dengue fever (DF), which was considered a rare disease entity in Nepalese context till recent past, showed a major outbreak in central Nepal recently. This study was aimed at describing the clinical and laboratory profiles of Dengue Fever patients during the outbreak in Chitwan and adjacent districts.

Method: A prospective observational analytical study conducted in the Department of Medicine at Chitwan Medical College, Nepal.

Result: Out of 1456 patients with acute febrile illness, 426 (29.29%) were tested positive for DF, out of which 414 patients were included in the study. 84.57% of the patients were in the age group of 16 to 60 years. Most common clinical presentations were fever (100%), headache (97%), bodyache (93%), nausea (85%), vomiting (63%), retro-orbital pain (49%), itching (43%), abdominal pain (42%), skin rashes (27%) and loose motion (26%). 90% of patients were admitted in the hospital and 3% required ICU admission. Dengue Fever (DF) and Dengue Hemorrhagic Fever (DHF) were present in 79% and 21% of the patients respectively. Thrombocytopenia was present in 70% of patients. Leucopenia was seen in 54% of patients.

Conclusion: Dengue is no more a stranger's disease in Nepalese context and precautions are to be taken when residing/travelling Nepal.