

**PP-081** Quantitation of bacteria in gastric biopsy specimen from patients with gastrointestinal disorders: relationship between counts and clinical features

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**Background:** *H. pylori* is the only bacteria that infect humans gastric for which endoscopy examination is routinely recommended. The risk of development of gastrointestinal disorders (GIDs) in the presence of *H. pylori* infection depends on a variety of factors including bacterial, host, and environmental ones that mostly relate to the pattern of bacterial load. The aim of this study is to evaluate the relationship between *H. pylori* disease associated clinical features and bacterial count.

**Methods:** A prospective study of the concentrations of bacteria in the gastric and their relationship to clinical features was conducted with 200 *H. pylori* suspected patients with GIDs. Initially, clinical status was evaluated and recorded by questionnaire. Then, RUT and 16SrRNA PCR were performed for identification of *H. pylori*. Finally, gastric biopsy specimens were analyzed for bacterial count by using specific primers and probe for 23SrRNA and using Taq-Man real-time PCR technology. Statistical analyses were performed using the  $\chi^2$  test. *P*-values less than 0.05 were taken to indicate statistical significance.

**Results:** Of whom 200 samples, 164 (82%) had confirmed *H. pylori* positive. For 164 patients with GIDs, the count of *H. pylori* in gastric biopsies were a value of  $10^4$  to  $10^{12}$  CFU/ml. The results revealed that more relationships between acid reflux and  $10^4$  CFU/ml ( $p=0.006$ ) and vomiting and  $10^4$  CFU/ml ( $p=0.046$ ).

**Conclusion:** This study has demonstrated a relationship between bacterial load and clinical features in patients with GIDs. In conclusion, GIDs are similar to many other bacterial infections in that bacterial burden in the host is related to clinical features. Further studies are required to determine whether this is a function of the host, the infecting strain, or a combination of the two.

**PP-082** Clinical and pathological analysis of 183 patients with bacterial infectious diarrhea

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**Objective:** To investigate the clinical and pathological characteristics of bacterial infectious diarrhea.

**Methods:** The clinical and pathological characteristics of 183 cases of bacterial infectious diarrhea in Second Affiliated Hospital of Xinjiang Medical University from 2009 to 2010 were analyzed retrospectively. Enumerated data were analyzed by test.

**Results:** Among the 183 patients who went to hospital because of diarrhea in 1 year, 26 cases fecal bacterial culture were positive, including *Shigella* (14 cases, 53.8%), *E. coli* (5 cases, 19.2%), *Salmonella* (3 cases, 11.2%), *Klebsiella pneumoniae*, *Aeromonas hydrophila*, *Morganella morganii* strains, Reid *Providencia stuartii* infection in 1 case. Patients with diarrhea were common from June to October in each year. The main manifestations of *Shigella* infection were abdominal pain diarrhea, nausea, vomit or dehydration. The main manifestations of *E. coli* infection were fever, abdominal pain and diarrhea.

**Conclusions:** The bacterial culture positive rate of stool samples from patients with bacterial infectious diarrhea is not high in shuimogou district, Urumqi. The major pathogens is *Shigella*.

**Poster Session – Hepatitis B**

**PP-083** The epidemiological study of hepatitis B virus infection with slaughter swines in Dali

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**Objectives:** We designed these experiments in order to detect the infection of swine hepatitis B virus (sHBV) with serological and histological techniques for 220 slaughter swines in Dali, to understand the prevalence of sHBV infection and the virus genotype, to test liver tissue histopathological changes and to search relationships with humans in serological and histological after sHBV infection.

**Methods:** In this study, we collected 220 serum and liver samples with identification code from slaughter swine in Dali. Serum HBV marker (HBVM) were detected by enzyme-linked immunosorbent assay (ELISA) and type-specific PCR was used to detect the genotype of swine HBV. Hepatic tissue were fixed after conventional dehydration of two slices (4  $\mu$ m  $\times$  2), conventional pathological changes in lesion by routine HE dyeing and HbsAg/HbcAg in hepatic tissue were detected with immunohistochemistry detection kit of PV-9000.

**Results:** (1) HBVM results of 220 serum samples: prevalence rate of sHBV were 59.1% (130/220); all of HbsAg, HbeAg, HBcAb positive rate were 0.9% (2/220); of which, 28 samples were HbsAg-positive, the positive rate was 12.7 (28/220); total of negative rate was 40.9% (90/220); (2) type-specific PCR test results: selecting HBVM and immunohistochemical positive samples (including all HbsAg-positive specimens), 67 samples were carried out PCR amplification and 36 samples showing specific gene bands after gel electrophoresis, of which, 34 cases shows in the B genotype zone and 2 cases in B+C zone. 25 cases were from both HbsAg-positive and HbcAg-positive and 11 cases were from HBsAg or HbcAg positive alone, and the difference between the two group was statistically significant ( $p<0.01$ ). (3) Hepatic tissue pathological test results: the result of hepatic tissue with HE dyeing showed inflammatory, cell infiltration, vacuolar degeneration, hepatic cell degeneration, necrosis, ect; 137 specimens were found positive reaction in immunohistochemistry, HbsAg mainly show serosal type, HbcAg mainly for the nuclear-type and mixed type of nucleus and cytoplasm. The pathological features was similar with the features of human HBV clinical and pathological stages.

**Conclusions:** There are a higher prevalence rate of sHBV in slaughter swine in Dali, and the genotype of infection is mainly B genotype, in accordance with the major genotype of human HBV infection in Dali.