AFP was observed in cytoplasm of Bel 7402 cells; The results is also showed that FRET was generated between FITC and TRITC which labeled PTEN and AFP respectively, and appeared the distance of fluorescent molecules was 6.7±1.5 Å; Treated with ATRA could enhance the expression of PTEN and decrease the phosphorylation of AKT after knockdown the expression of AFP.

Conclusions: These data provide the first evidence that AFP has a property to interact with PTEN and inhibit the activity of PTEN, this is also the pivotal events that AFP activated the transduction of PI3K/AKT signal of hepatoma cells.

Clinical analysis of chronic liver failure and decompensated cirrhosis in patients with blood gas analysis

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Objective: To investigate clinical significance and pathogenesis of Change of blood gas analysis on Chronic liver failure and decompensated cirrhosis.

Methods: The blood gas analysis datas of 37 cases of chronic liver failure and decompensated cirrhosis were analyzed retrospectively.

Results: 36 cases of patients with acid-base imbalance, alkalosis-based type of acid-base imbalance is common, respiratory alkalosis, respiratory alkalosis combined metabolic acidosis and respiratory alkalosis combined metabolic alkalosis have a higher proportion, the two groups of various types of acid-base imbalance in blood gas analysis indexes have no significant (P>0.05), 10 cases of patients with hypoxemia.

Conclusion: Chronic liver failure and cirrhosis patients affect acid-base imbalance of the body and the existence of hypoxemia, and have the similar Mechanism. Dynamic monitoring of blood gas analysis and timely symptomatic treatment of such patients have a clinical significance.

Poster Presentation – Fungal Infections

The inducible efficacy of IFN-γ provoked by interleukin-12 and/or low dose interleukin-2 in invasive pulmonary aspergillosis (IPA) mice model

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Background: Invasive Pulmonary Aspergillosis (IPA) is an intracellular opportunistic fungus causing invasive pulmonary mycosis, characterized by hyphal invasion and destruction of pulmonary tissue. Little is known about the expression of IFN-γ in the serum and pulmonary tissue in IPA infection, which induced by the combination of IL-12 and IL-2 in IPA infection. The inducible efficacy of IFN-γ and inhibition effect for Aspergillus fumigatus infection in the pulmonary by IL-12 and/or IL-2 was assessed in the study.

Methods: The animal model of pulmonary aspergillosis infection was prepared; Real-time RT-PCR assays for specifically quantify mouse IFN-γ transcripts, and an assay for Lung CFU (Colony-forming unit). Histopathological sections were observed in the different interleukin treatment groups respectively.

Results: Our results showed that the inhibition of A. fumigatus from lungs of immunosuppressed mice is correlated with Th1 cytokines, Interleukin-12 was proven to enhance the IFN-γ mRNA local expression in the pulmonary tissue, but it did not dramatically increase and/or decrease the serum level of IFN-γ. Moreover, Th1 cytokines (IL-12 and/or IL-2) were observed to strongly correlate with the inhibition of pathological colonies.

Conclusion: The accumulation of inflammatory mononuclear leukocytes at sites of infection is considered to be regulated by the local production and secretion of IFN-γ, and the sera levels of IFN-γ did not be used as potential indicator for therapeutic monitoring.

Cryptococcal meningitis in HIV-negative patients

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Objective: To describe the clinical characteristics, mycological profile, treatment, and outcomes of cryptococcal meningitis in HIV-negative patients.

Methods: HIV-negative adult patients with positive cerebrospinal fluid culture for Cryptococcus neoformans who attended Changzheng Hospital between 1997 and 2008 were retrospectively reviewed.

Result: During the 12 year review period, 62 HIV-negative patients with cryptococcal meningitis were identified. Thirty-four patients (55%) had associated underlying conditions and twenty had bird-droppings contact history. The most common associated conditions included immunosuppressive drug treatment, connective tissue disease, and diabetes mellitus. Intravenous Amphotericin B and oral 5 fluocytocin for at least 6 weeks with continued oral fluconazole or itraconazole for at least 10 weeks showed to be effective treatment choice. During the treatment, mycological test result showed that CSF culture result turned to be negative in all patients after 2 weeks of treatment, and CSF antigen test showed 100% positive rate and decreased slowly and irregularly during and after treatment. The overall mortality rate was very low.

Conclusion: Cryptococcal meningitis is not rare in HIV-negative patients. Antifungal therapy with comparatively long periods in these patients may improve clinical outcomes, which was confirmed by mortality rate and mycological test result.

Poster Presentation – Gastro-intestinal Infections

Helicobacter pylori infection in patients with digestive complaints in northeastern Iran

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Background: Helicobacter pylori (HP) infection is the most common gastrointestinal bacterial disease worldwide. Although culture method is golden standard method for diagnosis, urea broth test (UBT) is non-invasive method with high specificity and sensitivity, relatively. The aim of this study is non-invasive detection of H. pylori infection prevalence in patients with digestive discomforts using UBT in Mashhad located in Iran northeastern.

Methods: The study involved 814 patients (467 women and 347 men, 17–80 years) from January 2007 to November 2008, who had symptoms. The 14C-UBT was performed by ingestion of a solution of labeled urea by patient. The labeled CO2 is absorbed by the blood and exhaled in expired air. The expired air was collected by the Heliprobe breath card (a color change indicated that a sufficient volume of CO2 had been collected) and analyzed (Noster System, Stockholm, Sweden).

Results: 698 (85.75%) of 814 studied patients were positive and 116 (14.25%) were negative. 403 (86.30%) of women and 295 (85.01%) of men had HP and no significant difference was observed between two groups (p=0.05). Positive cases were clas-
sified according age. The highest rate of infection was observed in 50-60 years old patients.

Conclusion: Since HP is related to dangerous disease, therefore diagnosis and treatment of infected people’s especially symptomatic cases is significant. UBT make possible more recognition of infected people (in previous study the rate of infected people was 62.56% in patients with digestive complaints by direct stain, urease and culture method).

**PP-055** Detecting the genotypes of Helicobacter pylori in the development of gastric carcinoma subjects in Andhra Pradesh population

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Background and Aim: *Helicobacter pylori* has been a key determinant causing gastric adenocarcinoma. Not much is known of the genotypes of *H. pylori* infection among the gastric cancer subjects. Therefore the present study was designed to ascertain the genotypes of *H. pylori* in gastric cancer subjects.

**Methods:** 72 patients grouped on their endoscopic findings. Gastric biopsies were obtained for culture and DNA isolation.

**Results:** Genotypic analysis showed *cag* T+ve/*cagA*+ve/*cagE*+ve/*vacAs1*+ve genotype to be highly prevalent in 81.2% cases. This genotype was predominant in the Group-I subject those with gastric adenocarcinoma. Intestinal type adenocarcinoma subjects 91.4% harbored the remaining genotypes.

**Conclusion:** Certain genotypes of *H. pylori* in this study had higher predictive values for the development of intestinal type carcinoma at an early age. Further this study also showed genotyping *H. pylori* could well be used as an ideal tool for screening subjects at an increased risk of developing malignancy.

**PP-056** Status of hepatitis A surveillance in China

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**Background:** To better define the current epidemiology of hepatitis A and status of surveillance in China, in anticipation of introduction of universal hepA vaccination of young children in 2008.

**Methods:** Data from national notifiable disease reporting system from 1990 to 2007 was reviewed and epidemiology characteristics analyzed. Hepatitis A vaccine distribution was also reviewed.

**Result:** Incidence of hepatitis A has declined by 90% since 1990; declines in age specific incidences were seen in all age groups, but most dramatically among children less than 10 years. Disease incidence still varies substantially, with lower Western provinces having highest incidence since 2000. In the high incidence provinces, young children less than 10 years continue to have high disease incidence. Over 135 million doses of hepatitis A vaccine have been distributed since 1992, with increasing use since 2003.

**Conclusion:** Although incidence of hepatitis A has decreased in all age groups, high risks remain among Western populations with transmission predominantly among children. The epidemiology of hepA transmission is not well defined, and only 50% of cases are laboratory confirmed. Improved surveillance with more laboratory confirmation is needed to monitor impact of universal hepatitis A vaccination.

**PP-057** Risk of glandular atrophy, intestinal metaplasia and dysplasia in subjects with vacA positive and complete or disrupted cagE, cagT *Helicobacter pylori* infection

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Introduction: Glandular atrophy, intestinal metaplasia and dysplasia are pre-neoplastic lesions common in patients with chronic gastritis as in those with *H. pylori* infection. Therefore the present study was to investigate the association among *H. pylori* infection with *cagE*, *cagT* and vacA genes and the risk of precancerous lesions.

**Methods:** 120 patients were divided into different groups.

**Results:** Genotypic data revealed 42.5% strains with *cagE*+/*cagT*+/*vacAs1*+, and 7.5% strains with partially deleted *cagE*, *cagT* & vacA2. With respect to the clinical status, 67.5% subjects with overt diseases were infected with *cagE*+/*cagT*+/*vacAs1*+ genotype whereas 22.5% NUD subjects harbored strains with partial deletions and *s2* allele of vacA (*p*<0.01). Histology revealed atrophy, IM and dysplasia to be more prominent among subjects harboring above genotype compared to those with partially deleted genes (*p*<0.05).

**Conclusion:** Results demonstrates that the risk of overt gastric diseases was progressively higher as the number of virulence genes possessed by *H. pylori* increased.

**PP-058** *Helicobacter pylori* genotypes in different ethnic groups resident in Tehran, Iran

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**Objectives:** There is a geographic variation in *Helicobacter pylori* genotypes. *cagA* and *cagE*, *oipA* and vacA genotypes of *H. pylori* are associated with peptic ulcer disease (PUD). This study compared the distribution of these genotypes in major ethnic groups residing in Tehran, Iran and their association with clinical outcomes.

**Methods:** *H. pylori* infected patients proven by culture were recruited prospectively. DNA was extracted from isolated *H. pylori* and PCR was carried out to determine the *cagA*, *cagE* and *oipA* status or vacA alleles.

**Results:** A total of 124 patients living in Tehran were enrolled in this study. The ethnic distribution was 74 Persian, 33 Turkish and other ethnics including 7 Kurdish, 5 Lurs, 3 Afghani and 2 Arab patients. The predominant vacA signal region genotype was *s1* among isolates from all ethnics. The vacA middle region genotype *pm2* was predominant in Persian and Turks. Of the Persian, Turkish and other ethnic isolates, 64.9%, 72.7% and 70.5%, respectively, were *cag*A positive, and 47%, 30% and 76.5%, respectively, were *cagE* positive. The *oipA* gene was present in 51.4% of Persian, 33.3% of Turks and 70.5 of others ethnics isolates.

**Conclusion:** There is difference in the *H. pylori* strains among the ethnic groups in Iran. However, there was no significant association between *cagA*, *cagE* and *oipA* status or vacA genotypes and clinical outcomes in Iranian patients irrespective of ethnic groups. None of these markers were helpful in predicting the clinical presentation of a *H. pylori* infection in Iran.