**PS 0442** Infectious Disease

**Distribution of Hepatitis B Virus Genotypes in Libya Using PCR-Based Diagnostics**

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**Background:** Hepatitis B virus (HBV) represents a global health challenge due to its worldwide distribution and serious complications. The HBV genotypes have different influence on clinical picture, response to treatment and the long-term prognosis. Eight genotypes have been identified and a ninth is on the horizon, with distinct geographical distributions.

**Aim:** The aim of this study was to investigate the prevalence of HBV genotypes in Libyan patients.

**Methods:** Quantitative real-time PCR assay was carried out on 121 clinical specimens.

**Results:** DNA Quantity ranged from < 50 to 3.6x10^9 IU/ml. 85 specimens with DNA quantity more than 1,000 copies/ml were extracted and amplified. 60 specimens which had bands on 2% agarose gel were hybridized by the INNO-TEK HBV Genotyping assay. Three genotypes were detected; D in 54 specimens (90%), A and E in 1 specimen for each (1.70%) and 4 specimens (6.70%) were mixed genotypes D/E.

**Conclusions:** This study indicates that the predominant genotype in Libyan patients is genotype D.

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**PS 0443** Infectious Disease

**Empyema Caused by Listeria Monocytogenes in a Patient with Chronic Kidney Disease: A Case Report**

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**Background:** Listeria monocytogenes is a gram-positive bacillus, usually presents as meningitis or bacteremia. Although other manifestations such as brain abscess, infective endocarditis, hepatitis have been described, empyema caused by L. monocytogenes in a patient with chronic kidney disease is extremely rare. Here, we report a case of empyema due to L. monocytogenes in a patient with chronic kidney disease.

**Case report:** 67-years old woman with chronic kidney disease requiring hemodialysis, has admission due to cough and pleuritic chest pain. Chest radiography revealed pleural effusion and pneumatic infiltration on right lower lung field. Thoracostomy was performed yielding a yellowish fluid. Pleural fluid analysis showed an exudate as meningitis or bacteremia. Although other manifestations such as brain abscess, infective endocarditis, hepatitis have been described, empyema caused by L. monocytogenes in a patient with chronic kidney disease is extremely rare. Here, we report a case of empyema due to L. monocytogenes in a patient with chronic kidney disease.

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**Conclusion:** Our case suggested that L. monocytogenes should be considered in the differential diagnosis as an important pathogen that causes the empyema in an immunocompromised patient.

**PS 0444** Infectious Disease

**Mononuclear Syndrome with Acute Hepatitis Diagnosed with Mycoplasma Pneumoniae Infection without Lung Involvement**

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**Background:** Although pneumonia has been a hallmark of Mycoplasma pneumoniae infection, it has been also associated with the protein manifestation as extra-pulmonary involvement. Herein, we report a case of mononuclear syndrome with acute hepatitis and erythema multiforme, revealed as M. pneumoniae infection without lung involvement.

**Case report:** A 30-year-old man presented with a 3-day history of skin rash. He had been having high fever and myalgia for 7 days. On admission, physical examination revealed erythema multiforme on trunk and tenderness on right-upper quadrant abdomen. Laboratory examination showed the evidence of mononucleosis-like syndrome. Liver function tests showed aspartate aminotransferase (AST) 504 IU/L, alanine aminotransferase (ALT) 578 IU/L, LDH 1.18 mg/dl. Abdomen computed tomography showed reactive gallbladder wall thickening, and small-sized lymphadenopathy around aorta and portal vein. Chest X-ray showed no significant shadows. On the 8th hospital day, liver function tests were aggravated and he was diagnosed as bacterial infection due to ascites. Bone marrow biopsy revealed increased plasma cell infiltration. IgM antibodies for M. pneumoniae were negative by enzyme immunoassay on admission. However, the titer for M. pneumoniae was 1:640 on the 10th hospital day. The patient was initiated on levofloxacin (500 mg per a day for 17 days) and the symptoms cleared after 3 days. The patient was discharged in good condition. No relapse was noted over a 3-month follow-up period.

**Conclusion:** In conclusion, we report the rare case of M. pneumoniae infection presenting with extra-pulmonary manifestations. Particularly, recognition of this etiologic association is important since specific antimicrobial therapy is effective against M. pneumoniae, when the patients revealed the various clinical syndromes without pneumonia.

**PS 0445** Infectious Disease

**A Case of Infective Endocarditis Caused by Bacteroides Fragilis**

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**Purpose:** To describe an interesting case of Bacteroides fragilis endocarditis complicating in a patient with no previously known valvular heart disease during hospitalization.

**Case report:** A 62-year-old female had been hospitalized due to severe life-threatening necrotizing fasciitis in both legs, caused by Group A Streptococcus pyogenes. On the 27th hospital day, she developed an episode of hematochezia during stay in an ICU. Colonofiberoscopic findings disclosed multiple ulcers from cecum to descending colon, which was confirmed as cytomegalovirus (CMV) colitis by the coloscopy biopsy and positive CMV antigenemia (12/200,000 WBC). During the period between the 34th and 37th hospital days, she developed intermittent high fever and chills. Bacteroides fragilis was isolated from both blood and pleural fluid cultures. Abdominopelvic CT scan findings revealed complicated fluid collection with free air in the perihelical space, suggestive of suspicious communication with hepatic flexure colon such as colonic perforation. The echocardiographic examination demonstrated a pouch-like structure on the posterior mitral leaflet and mild eccentric mitral regurgitation and leaflet destruction with rupture that were not seen in the previous examination. She was diagnosed acute infective endocarditis with B. fragilis and started with meropenem and metronidazole. Thoracostomy for drainage of pleural effusion and percutaneous peripheric space drainage of periheliatric fluids were also performed. On day 43rd hospital day, she showed a high fever and an episode of drowsy mentality. Brain MRI diffusion revealed multiple acute embolic infarctions from cerebral cortices to cerebellar hemispheres. Her symptoms and signs related to endocarditis were almost improved when a total of 23-day of antibiotic therapy ended.

**Conclusion:** We report an interesting case of Bacteroides fragilis endocarditis, probably due to colonic perforation in a critically ill patient with cytomegalovirus colitis.