TGF-β1 in each group. The apoptotic rate of hepatic cells in B was significantly reduced than that of C. **Conclusion:** Anti-IGFBP-rP1 can prevent the progression of hepatic fibrosis through inhibiting activation of HSC, reducing the expressions of Collagen I and FN, reducing hepatocyte apoptosis and so on. The possible mechanism may relate to the TGF-β1/Smad3 signal path.

**PP-036 Dynamic changes of both IGFBPPrP1 and transforming growth factor-1/Smad on liver tissue with fibrosis in mice**

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1 The First Hospital of Shanxi Medical University; 2 The Institute of Liver Disease of Shanxi Medical University

**Background:** To investigate dynamic expressions of IGFBPPrP1, TGF-β1 and Smad3 of mice with thioacetamide (TAA) - induced hepatic fibrosis.

**Methods:** Liver fibrosis model of mice was made by intra-peritoneal injecting with 5% TAA, 200mg/kg, three times per week, totally for 4 or 5 or 6 weeks. Collagen accumulation in liver tissues was detected by Masson staining. Distribution and dynamic expressions of IGFBPPrP1, α-SMA, Collagen I, FN, TGFβ1, Smad3 were detected by immunohistochemistry staining. Meanwhile, expressions of IGFBPPrP1, α-SMA, FN and Smad3 were examined by Western Blot.

**Result:** During the progression of hepatic fibrosis, expressions of Collagen, IGFBPPrP1, α-SMA, Collagen I, FN, TGFβ1, Smad3 were gradually increased. Correlation analysis of immunohistochemical staining: during liver fibrosis developing phases, IGFBPPrP1 was significantly positively correlated with α-SMA, Collagen I, FN, TGFβ1, Smad3. The results of Western Blot analysis: Molecular weight of β-actin, IGFBPPrP1, α-SMA, Smad3 were 43, 31, 45, 220 and 58kD. The contents of IGFBPPrP1, α-SMA, FN, Smad3 were significantly increased in model group compared with control group, which were gradually increased with process of fibrosis. There was a significant difference among model group. Correlation analysis of Western Blot analysis: There was a positive correlation between the expression of IGFBPPrP1 and the expression of α-SMA, FN, Smad3.

**Conclusion:** IGFBPPrP1 was involved in the formation and development of hepatic fibrosis; Meanwhile, this function of IGFBPPrP1 probably relates to promote activation of HSC; promote the synthesis and secretion of both collagen and FN; affect TGFβ1/Smad3 pathway.

**Poster Presentation – Diagnosis & Laboratory Systems Development**

**PP-037 Screening of specific serum biomarker of anklosing spondylitis from a random peptide library**

Min Wang*, Xianping Li. Department of Clinical Laboratory, The Second Xiangya Hospital of Central South University

**Objective:** To screen the specific serum biomarker of anklosing spondylitis using peptide library biopanning technique.

**Methods:** Phage random peptide library of 12 amino acids was immunoscreened with purified IgG from sera of anklosing spondylitis (AS) patients. Positive clones which were obtained after 3 rounds of biopanning were detected by ELISA and 7 of them were sequenced. The binding test of positive clones with the AS patients, systemic lupus erythematosus (SLE) patients, rheumatoid arthritis (RA) patients, Osteoarthritis (OA) patients as well as healthy controls were detected using phage-ELISA. The correlation analyses were evaluated among the absorbance and erythrocyte sedimentation rate (ESR) and C- reactive protein (CRP).

**Result:** After 3 rounds of screening, the radio of output to input increase to 1.9×10^4. At the 3rd round of screening, 20 clones were selected and 17 were proved to specifically react with the sera of AS patients. The 7 clones sequenced were come from the same one named AS1. Its inserted sequence was deduced to be QSQRRSIMMM. The positive rate of AS1 in diagnosis AS patients, SLE patients, RA patients, OA patients and healthy control group was 92.0%, 56.7%, 50.0%, 13.3% and 14.0% respectively, and there was significant difference (χ^2=77.418, P<0.01). The absorbance values showed positive correlation with ESR and CRP, the correlation coefficients were 0.165 and 0.239.

**Conclusion:** These finding indicated that the short peptide QSQRRSIMMM could be the specific serum biomarker of AS and may be used in laboratory test.

**PP-038 Dynamic expression of hypoxia inducible factor-1α during the development of hepatocellular carcinoma and its clinical values**

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**Objective:** To investigate the dynamic expression and alteration of hypoxia inducible factor-1α (HIF-1α) and its pathological features in hepatocellular carcinoma (HCC).

**Methods:** Hepatomas model was induced with 2-FAA on male SD rats for investigating dynamic changes of HIF-1α. Liver specimen from HCC patients were collected by self-control method. The expression, cellular distribution, and pathological features of HIF-1α were analyzed by immohistochemistry.

**Results:** Rat hepatocytes from granule-like degeneration to atypical hyperplasia and HCC development, and the progressing increasing of the levels of hepatic HIF-1α and HIF-1α mRNA expression during the course. The levels of HIF-1α in hepatoma tissues and sera were significantly higher than those in normal and degeneration ones. There was positive relationship of HIF-1α levels between them in hepatoma tissues and sera (P<0.05). The positive HIF-1α was as brown and granule-like, mainly presented in cytoplasm and few in nucleus. The incidence was 80% (28/35) in HCC, and 100% (35/35) in its surrounding tissues (P<0.001), respectively. The clinical pathological features of HIF-1α expression demonstrated that it correlated with tumor size, and its intensity was negative correlated with the differentiation of HCC. No correlation was found between HIF-1α and tumor numbers or serum AFP level or positive-HBsAg.

**Conclusions:** Hepatic HIF-1α overexpression are associated with development and prognosis of HCC.

**PP-039 Determine the new serotype 6C Streptococcus pneumoniae by serological method**

Zunjie Liu*, Kaihu Yao, Lin Yuan, Wei Gao, Sangjie Yu, Yonghong Yang. Beijing Pediatric Research Institute, Beijing Children’s Hospital affiliated to Capital Medical University

**Objective:** To prepare serotype 6C diagnostic Streptococcus pneumoniae antiserum, to determine it was a new serotype.

**Methods:** Serotype 6C was determined in USA by using multibean assay. Immunizing rabbits with serotype 6C pneumococcal strains for one month. Detected the capsular titres of antiserum with 6A, 6B and 6C before absorbed and latter by cross-reaction strains.

**Results:** None capsular reactions were detected from the antisera 1×, 2×, 4×, 8×, 16×, 32×, 64× and 128×. Table 1. Capsular titers of serotype 6C rabbit antisera to type 6A, 6B and 6C.

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Hepatoprotective potential of root extracts of Elephantopus scaber L. on D-galactosamine/lipo polysaccharide induced hepatitis in rats

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Background: Methanolic extract of Elephantopus scaber L. (MEES) was evaluated for its hepatoprotective potential against D-Galactosamine/Lipopolysaccharide (D-GalN/LPS) induced hepatisis in rats.

Methods: Rats were given a single intraperitoneal injection of D-GalN/LPS (300 mg/kg body weight and 30 μg/kg body weight) to induce liver damage. MEES was administered to rats (200, 400 and 600 mg/kg body weight for 6 days) 18 h before D-GalN/LPS challenge.

Results: D-GalN/LPS intoxication resulted in liver injury as indicated by the significant increase (p < 0.05) in the serum activities of marker enzymes such as aspartate amino transferase, alanine aminotransferase, alkaline phosphatase, lactate dehydrogenase and γ-glutamyl transpeptidase. Further, there was a significant increase (p < 0.05) in the levels of cholesterol, triglycerides and free fatty acids followed by a decrease in the levels of phospholipids in serum and liver in dose dependent manner. Pretreatment with MEES reversed these alterations to near normal.

Conclusion: Results of this study revealed that MEES could afford a significant protection in the alleviation of D-GalN/LPS induced hepatocellular injury.