

of DCs in HCV infection and shed light on the DC-based immunotherapeutic strategy.

PP-152 A novel model predicting mortality of the hospitalized patients with acute-on-chronic hepatitis B liver failure

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Background: Liver failure usually progresses into a poor mortality. Despite their accuracy, classic models including model for end-stage liver disease (MELD) and Child-Pugh score (CPS), are mainly being accepted to determine the prognosis of patients with end-stage liver disease. However, these models are still controversial in predicting mortality of patients with acute-on-chronic hepatitis B liver failure (ACHBLF). In this study, we aim to evaluate the possibility to better predict mortality of the hospitalized patients with ACHBLF using a novel logistic regression model (LRM).

Methods: The LRM was constructed using data from 242 consecutive patients with ACHBLF at Liver Research Center, Wenzhou, China (internal cohort). The LRM was tested on 210 patients listed for medical treatment at Tianjin Infectious Disease Hospital, China (external cohort). The receiver operating characteristic curves (ROCs) were drawn for LRM, MELD, CPS and Sun's model. Predictions of mortality obtained with four models on the same datasets were compared using areas under ROC curves (AUC).

Result: In internal cohort, there were 75 patients who died in hospital (31.0%). The mean MELD score for the patients who died was significantly greater than those who survived (26.8 vs. 22.4, $p < 0.001$). The LRM performed excellent diagnostic accuracy significantly better than MELD, CPS and Sun's model both in the internal cohort (AUC = 0.873 vs. 0.694 vs. 0.718 vs. 0.786; $p < 0.001$, $p < 0.001$, $p = 0.002$, respectively) and in the external cohort (AUC = 0.844 vs. 0.775 vs. 0.601 vs. 0.753; $p = 0.035$, $p < 0.001$, $p = 0.004$, respectively).

Conclusion: Our newly established LRM was superior to MELD, CPS and Sun's model in predicting mortality risk of hospitalized patients with ACHBLF.

PP-153 Acute fatty liver of pregnancy: report of 27 cases

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Objective: To explore the clinical profile, biochemical findings, complications and maternal outcome in patients of acute fatty liver of pregnancy (AFLP).

Methods: Patients with AFLP hospitalized in Beijing Ditan Hospital from Sep 1996 to Nov 2010 were analyzed. The clinical feature, laboratory examination, and treatment were retrospectively analyzed.

Results: There were 27 women included in this study with a mean age of 27.7 ± 3.3 years (23 to 34 years). The mean gestational age was 35.9 ± 2.2 weeks. There were 3 cases death (11.1%). The most common symptoms at admission were jaundice (20 cases), fatigue (16 cases), nausea and vomiting (13 cases) and pruritus (5 cases). During hospital stay, three patients presented psychiatric symptom, manifesting as visual hallucination, auditory hallucination, and delusion of persecution. Laboratory

examination: WBC increased, anemia, thrombocytopenia, hypoalbuminemia, the total bile acid increased, coagulation dysfunction (PTA $< 80\%$) and renal injury. Compared with non-ALF group ($n = 14$), the ALF group ($n = 13$) patients have higher white blood cell, TBIL, DBIL, Cr lever and lower hemoglobin and PTA ($P < 0.01$). The ALF group patients were more likely to present hypoglycemia, acute renal failure, coagulation disorders, acute respiratory distress syndrome, neonatal asphyxia, post-partum hemorrhage and fetal death ($P < 0.05$). There are 24 cases discharged home with full recovery of hepatic and renal function. Other three cases were dead. The causes of death were cerebral hemorrhage, post-partum hemorrhage, hemorrhagic shock and multiple organ failure.

Conclusions: (1) Patients with ALF are more likely to occur multiple organ dysfunction, asphyxia neonatorum and fetal death. (2) With adequate support, the most patients may have full recovery of hepatic and renal function.

PP-154 Alpha fetoprotein is a novel inhibitor of apoptosis protein mediated human hepatoma Bel 7402 cells resisting the apoptosis induced by TRAIL

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Objective: AFP has a property to maintain hepatocellular carcinoma cells (HCC) growth in vivo, and hepatitis B virus X (HBX) protein up-regulates AFP expression in HCC, but the critical function of AFP was unclear, the present investigation explore the influence of AFP on the apoptosis induced by tumor necrosis factor-related apoptosis-inducing ligand (TRAIL) of HCC.

Methods: Co-localization and interaction of AFP and caspase-3 or caspase-8 observed by confocal microscopy or co-immunoprecipitation (Co-IP); siRNA was applied to knockdown the expression of AFP in Bel 7402 cells (AFP-producing); The activity of caspase-3 or caspase-8 was detected by protease activity colorimetric methods; Flow cytometry and MTT were used to analyze apoptosis and growth of the cells; and fluorescent microscopy was used to observe the apoptosis of Bel 7402 cells.

Results: AFP harbors a function to interact with caspase-3 in cytoplasm, but could not binding with caspase-8; The activity of caspase-3 or caspase-8 was enhanced and the expression of AFP was repressed when treated with all trans retinoic acid ($40 \mu\text{mol/L}$) plus TRAIL (2nmol/L); Treated with TRAIL (2nmol/L) alone, the activity of caspase-8 was promoted and activity of caspase-3 has not any alteration; AFP was able to inhibit the activity of caspase-3 but it has any effect on the activity of caspase-8 in vitro; Bel 7402 cells resisted the apoptosis induced by TRAIL (2nmol/L); While knockdown AFP expression by siRNA followed treatment with TRAIL (2nmol/L), caspase-3 activity was increased but caspase-8 activity had not any change, and Bel 7402 cells growth were inhibited (ratio 48.4%), and TRAIL could induce the apoptosis of the cancer cells.

Conclusions: AFP inhibits caspase-3 activity is the pivotal events that AFP mediated HCC resists apoptosis induced by TRAIL.