Clinical Hepatology

IDDF2019-ABS-0018 EVALUATION OF ANTI-CANCEROUS AND GENOTOXIC MECHANISMS VIA GENE EXPRESSION ANALYSIS OF VARIOUS EXTRACTS FROM THERMOPSIS TURCICA IN LIVER CANCEROUS CELL LINE

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Background The hepatocellular carcinoma is a devastating disease and it's a fifth common cancer. It has increased from the last ten years and the third commonest cause of cancer-related death. Many species of *Thermopsis* have been used as a source of traditional oriental medicines. Its many species are endemic in different regions of the world, for example, *Thermopsis turcica* (*T. Turcica*) is endemic to turkey. The Current study was designed to investigate the anticancerous and apoptotic mechanisms via gene expression analysis of various extracts from *T. turcica* in HepG2 cell line.

Methods Different doses of *T. turcica* extracts were used in MTT assay; cytotoxic and non-cytotoxic concentrations were used in comet test and qRT PCR to find the genotoxicity and gene expression analysis of apoptotic and repair genes.

Abstract IDDF2019-ABS-0018 Figure 1 Molecular mechanism interaction of apoptosis and cell cycle arrest induced by the various extracts of *t. turcica*

Results In MTT cytotoxicity assay, Ethyl acetate extracts showed the highest cytotoxic effect, compared to other extracts. Methanol had more effect at a higher concentration compared to ethanol. Water and hexane had the least cytotoxic effects. Depending upon the MTT results, cytotoxic and non-cytotoxic doses were selected as 200 µg/ml and 50 µg/ml, respectively. Ethyl acetate showed the highest DNA damage (22.33 ± 1.52) at cytotoxic concentration. While least was observed in water extract (8.33 ± 1.73 ; 4.33 ± 0.57) at both concentrations, respectively. All groups were significantly differ

($P > 0.05$) from the control group at 200 µg/ml concentration. Up regulation of the p53, p21, Cyclin D1, NFkB, TRAIL-R1 and TRAIL-R2 was observed, Whereas, down-regulation was observed in PCBP4, Bax, bcl-2 and bcl-xl genes at all concentrations of the all extracts. Caspase 3, 8 and 7 were also expressed at all doses of different extracts, except for the hexane and water, where they were down-regulated. DNA repair genes were up regulated except at the non-cytotoxic concentrations of hexane and at both concentrations of water extracts (figure 1).

Conclusions Various extracts of *T. turcica*, expressed the anti-cancerous activity in the HepG2 cells and Ethyl acetate extracts had the highest cytotoxic and genotoxic activity.

IDDF2019-ABS-0020 ACUTE CHOLESTATIC HEPATITIS INDUCED BY EPSTEIN-BARR VIRUS INFECTION IN AN ADULT

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Background Acute cholestatic hepatitis without features of infectious mononucleosis is a rare presentation of primary Epstein-Barr virus (EBV) infection, with only several cases previously reported in the medical literature.

Methods A 24 years old young man with a febrile illness was noted to have a cholestatic picture of deranged liver function tests. Over the following week, progressive obstructive jaundice developed, with no evidence of choledocholithiasis on ultrasound and magnetic resonance cholangiopancreatography. Serological tests for hepatitis A, B, C, E, cytomegalovirus (CMV), leptospirosis were negative. Specific immunoglobulin M antibodies against EBV were detected in his serum and the diagnosis of EBV associated hepatitis was confirmed by polymerase chain reaction testing.

Results Supportive treatment was implemented and his liver function had normalized 3 months after presentation.

Conclusions EBV is associated with a wide variety of clinical manifestations and can present as cholestatic hepatitis with or without features of infectious mononucleosis. While the diagnosis is often suggested by serological testing, EBV polymerase chain reaction is a new non-invasive laboratory study that can help identify infection in cases where the clinical presentation is atypical. Early investigation for EBV in febrile patients with deranged liver function tests and no demonstrable biliary obstruction on imaging can expedite both diagnosis and treatment, thereby avoiding costly or invasive procedures such as liver biopsy.

IDDF2019-ABS-0023 EUS-GUIDED VERSUS ERCP-GUIDED BILIARY DRAINAGE FOR PRIMARY PALLIATION OF MALIGNANT BILIARY OBSTRUCTION: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background Current evidence supporting the utility of endoscopic ultrasound-guided biliary drainage (EUS-BD) as a first-