Conclusion: Ethanol exposure of 3T3L1 cells results in an increased oxidative stress and an up regulation in proinflammatory cytokine levels.

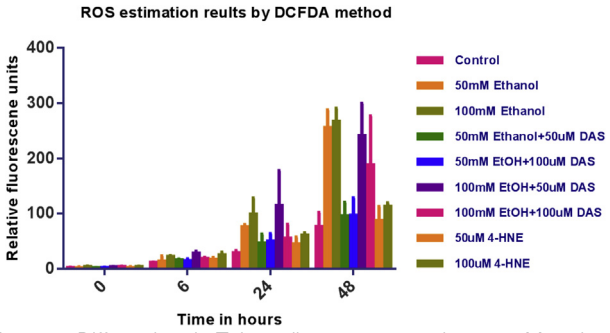

Figure 1 Differentiated 3T3L1 were exposed to 50 mM and 100 mM concentrations of ethanol respectively and ROS measurements were done for 0, 6, 24, and 48 h using SpectraMax M3 microplate reader from molecular devices at an excitation wavelength of 485 nm and emission wavelength of 530 nm. Ally sulphide, an inhibitor of CYP2E1 was added to the cells to test if it can reduce oxidative stress induced by alcohol and ROS measurements were recorded for 0, 6, 24, and 48 h. Data is analysed using GraphPad Prism6. Values are given as mean ± SD (n = 3). P < 0.05 vs control 3T3L1 cells.

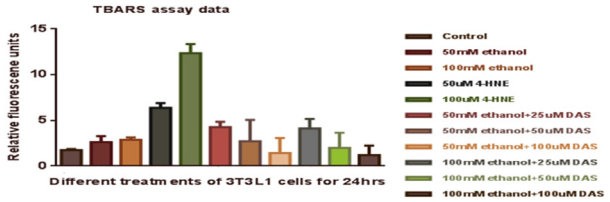

Figure 2 Differentiated 3T3L1 cells were exposed to 50mM and 100mM concentrations of ethanol respectively and MDA measurements were done after 24 h using SpectraMax M3 microplate reader from molecular devices an excitation wavelength of 530 nm and emission wavelength of 550 nm. Ally sulphide, an inhibitor of CYP2E1 was added to the cells to test if it can reduce oxidative stress induced by alcohol and MDA measurements were recorded after 24 h. Data is analysed using GraphPad Prism6. Values are given as mean ± SD (n = 3). P < 0.05 vs control 3T3L1 cells

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HEPTRAL® (ADEMETIONINE) IN INTRAHEPATIC CHOLESTASIS DUE TO CHRONIC NON-ALCOHOLIC LIVER DISEASE: SUBGROUP ANALYSIS OF RESULTS OF A MULTICENTRE OBSERVATIONAL STUDY IN INDIA

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Background and Objectives: Limited data are available on the use of ademetionine in non-alcoholic liver disease (NALD). The subgroup analysis of observational study which assessed effectiveness, safety and tolerability of Heptral® treatment in the management of NALD was done to understand efficacy of Heptral in cirrhosis and in patients who were prescribed Heptral alone.
Methodology: This prospective observational study included 250 patients across 23 sites in India. The assessments of health-economic parameters, liver biochemistry, signs and symptoms of IHC (fatigue, jaundice, and pruritus) were performed at two visits, i.e., at baseline and after six weeks of Ademetionine treatment. Ademetionine was prescribed as part of the routine medical treatment as per the local label and not as a study intervention.
Results: Total 244 patients were considered for full analysis, of which 75 patients had cirrhosis and 135 patients received Heptral alone. Heptral alone without any other concomitant hepatoprotector medications resulted in significant ($P < 0.05$) reduction in burden of disease parameters [mean reduction in number of days off work was 0.24 and number of visits to doctor was 0.76 ($P < 0.01$)], levels of biochemical markers [mean reduction in total bilirubin by 0.62 mg/dL, Alkaline phosphatase (ALP) by 41.98 U/L, alanine aminotransaminase (ALT) by 52.62 U/L, aspartate aminotransferase (AST) by 36.72 U/L ($P < 0.01$)] and signs and symptoms of IHC [percentage of patients with jaundice reduced from 43.70% to 9.70%, pruritus reduced from 28.89% to 10.45% and fatigue reduced from 70.37% to 20.90% ($P < 0.01$)]. In patients with cirrhosis, ademetionine treatment (with/without concomitant medication) resulted in statistically significant reduction ($P < 0.05$) in burden of disease parameters [mean reduction in number of days off work was 0.43 and number of visits to doctor was 1.64 ($P < 0.05$)], levels of biochemical markers [mean reduction in ALP by 56.99 U/L and AST by 152.06 U/L ($P < 0.05$)] and signs and symptoms of IHC [percentage of patients with Jaundice reduced from 57.33 % to 36%, pruritus reduced from 58.67% to 25.33% and fatigue reduced from 86.67% to 61.33% ($P < 0.01$). Treatment was well tolerated. Two patients experienced SAEs; one resulted in death and the other required hospitalization. Both these events were considered as not related to the study drug by the investigators.
Conclusions: Heptral® alone showed significant improvement in burden of disease, laboratory markers, signs and symptoms of cholestasis. Patients with advanced liver disease like cirrhosis also got benefitted with Heptral®.
Disclaimer: Study was supported by Abbott India Ltd, Mumbai.

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