

OP 09-15: Hepatoprotective activity of Linklive Care™ against Paracetamol induced hepatotoxicity in female mice

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Link Livecare™ (LLC) consisting of 14 herbs: *Andrographis paniculata*, *Eclipta alba*, *Phyllanthus amarus*, *P. emblica*, *Piper longum*, *Terminalia chebula*, *T. bellerica*, *Tinospora codifolia*, *Curcuma longa*, *Glycyrrhiza glabra*, *Boerhavia diffusa*, *Osbekia octandra*, *Tephrosia purpurea* and *Vernonia cinerea* was formulated by an expert panel of Ayurvedic physicians at Link Natural Product (Pvt) limited as a hepatoprotective preparation. Hepatoprotective activity of the isopropyl alcohol:water (70:30 v/v) extract of LLC (80 and 160 mg/kg) was studied against paracetamol (PCM) induced hepatotoxicity in female mice at the Institute of Cancer Research (ICR). Silymarin was used as the positive control. Single oral administration of PCM (500 mg/kg) induced 50 % lethality in mice in the pathological control group after 24 hr. The same dose of PCM killed only 25% in LLC pre-treated group at the dose level of 80 mg/kg. The lethality is the same as the pathological control group (PCG) at the dose level of 160 mg/kg. However, with pre-treatment with silymarin at the dose level of 50 mg/kg, only 25% of the animals survived. The survivors in pre-treated groups showed reduction in elevation of serum alanine aminotransferase and aspartate aminotransferase levels compared to the survivors of the pathological control group ($p < 0.05$). Treatment related change in serum alkaline phosphatase and total bilirubin were not observed against PCM induced hepatic damage. PCM intoxicated animals showed centrilobular necrosis involving approximately 5% of the liver parenchyma. Pre-treatment with either the extract of LLC or silymarin showed only early pathological alterations of cell injury. These results indicate that extract of LLC increased the percentage of survival in mice against PCM induced hepatotoxicity at a dose of 80 mg/kg body weight.

Keywords: Polyherbal formulation, hepatoprotective activity, paracetamol, silymarin

OP 09-16: Evaluation of anti-diabetic activity of *Tragia involucrata* L. in Streptozotocin induced diabetic rats

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Tragia involucrata L. (Family: Euphorbiaceae) (TI), is known as Welkahambiliya in Sri Lanka and is a medicinal herb used in the Sri Lankan traditional medical system and Ayurveda. TI possesses hypolipidaemic, anti-inflammatory, analgesic, anti-cancer and anti-diabetic actions, among others. The present study investigates the anti-diabetic effect of TI hot water extract (HWE) using the therapeutic dose of 550 mg/kg, and two other doses of 875 mg/kg and 1100 mg/kg. Type 2 diabetes