

ABSTRACT

Background

The Methanolic Seed Extract of Cassia fistula has been widely used in various health modalities therefore the present study was conducted to see the effects of on Broiler chicks (*Gallus domestica*).

Materials and methods:

The Methanolic seed extract was taken out by mean of Soxhiet apparatus. The LD₅₀ value was taken by “Reed and Muench Method” (1983).The LD₅₀ value was found 60m/kgbody weight. The methanolic seed extract was dissolved in distilled water at different concentration i.e. 30, 40,50mg/kgbody weight of chicks. It was orally given to different groups of chicks for 7, 14 and 21 days along the control animals were given only distilled water. The effects of Methanolic seed extract of Cassia fistula on Chicks (*Gallus domestica*) were studied by for different hematological, serological and histopathology parameters.

Results:

The results showed that Haemoglobin (Hb), Red Blood Cells (RBC),white blood cell count (WBC). Liver function tests (LFT) and renal function tests (RFT) variables remained normal and showed improvements up to certain doses while toxic effects were noted with high doses. The values of Red blood cells, White Blood Cells, Hematocrits, Hemoglobin,Total Protein, Urea and Creatinine, Mean Corpuscular Hemoglobin, Mean Corpuscular Hemoglobin Concentration, Mean Corpuscular Volume, Cholesterol, Aspartate aminotransferase and Alanine Aminotransferase normal range after treatment with low days (30mg/kg body weight) and average dose (40kg/mg body weight) after 21 days but the range of these values decreased treatment with high dose (50/mg body weight) after 21 days.

The toxic effects were also noted histologically like with edema of hepatocytes and dilatation of portal triades, central veins and sinusoids while necrosis of hepatocytes arround Portal triade were also observed with higer doses used for longer periods.

conclusions:

It is concluded that Methanolic Seed Extract of Cassia fistula is a safer alternative medicine to improve Hb,WBC,LFT and RFT. All of the variables were related with dose and period.