Teratogenic effects and maternal toxicity sprague dawley rats fed Ficusdeltoidea leaves aqueous extract in late gestation

ABSTRACT

Ficusdeltoidea have many beneficial uses however no report has been documented on the possible teratogenic effects if consumed during pregnancy. A study was conducted to observe the effects of feeding Ficusdeltoidea leaves aqueous extract (FDLAE) to rats during the late gestation period. Thirty pregnant Sprague Dawley rats were divided equally into five groups: positive control (retinylpalmitate in corn oil), negative control (only water), vehicle control (corn oil), low dose (5g/kg/day) and high dose (10g/kg/day) of FDLAE. Dams were sacrificed at term and their uteri removed by Caesarean section. Livers, placentae and kidneys of dams were subjected to histopathological examination. Fetuses were stained with Adlizarin Red S to observe skeletal malformations. The results showed that the maternal liver and kidneys were significantly (p<0.05) affected in FDLAE treatment and positive control groups, however only the placenta was affected in the positive control group. Mortality of dams and numerous skeletal abnormalities of fetuses were also observed in FDLAE treatment groups. We suggest that feeding FDLAE to pregnant dams during the late gestation period cause teratogenic effects and contribute to maternal toxicity.