Comparison of metabolic profile in Brown Swiss cows that bearing male and female calf in periparturient period

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This study aimed to investigate trace element levels, metabolic and hormone profiles of male calf bearing (MCB) and female calf bearing (FCB) cows in periparturient period. In the present study, 20 Brown Swiss (4-5 years old and 500-550 kg weighing) cow was used as animal material. Blood samples were collected on prepartum 21th day. According to birth records samples were classified as MCB (n=11) and FCB (n=9). 9 of the cows were selected as the control group (C) and after 21 days from the births blood samples were collected. Biochemical analyses (glucose, urea, cholesterol, creatine, Ca, Cl, Na, P, K, Fe, Mg, FSH, LH and progesterone) of the samples were done. Our findings showed that glucose, Na, Cl, and progesterone levels in both pregnancy groups were significantly higher than the control group. Alternatively, cholesterol levels of the both pregnancy groups were significantly lower when compared to the C group. Urea level in MCB group was significantly higher than in both FCB and C group. Ca levels in MCB group were similar with FCB group but higher than the C group. On the other hand, there were no any differences among the all groups for creatine, K, P, Mg, Fe, FSH and LH levels.

Investigation of the effects of chrysin on paracetamol-induced liver damage in rats

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In this study, it was aimed to investigate the effects of chrysin (CH) on the liver toxicity of high doses of paracetamol (PCM). A total of 35 Sprague Dawley rats were used in this study, including 5 groups with 7 rats in each group. The control group (healthy) was given orally saline (SF) only for 6 days but not any other drugs. The CH group was given 50 mg/kg/day of CH orally for 6 days. The PCM group was given SF orally for 6 days and then 500 mg/kg single oral dose of PCM 30 min after SF treatment on the 6th day. The PCM+CH 25 mg/kg/day group was given CH (25 mg/kg/day) orally for 6 days and then single oral dose of PCM (500 mg/kg/day) 30 min after CH treatment on the 6th day by gavage. Similarly, the PCM+CH 50 mg/kg/day group was given CH (50 mg/kg/day) orally for 6 days and then single oral dose of PCM (500 mg/kg/day) 30 min after CH treatment on the 6th day by gavage. It was determined that in the PCM group compared with the control group, the serum ALP, ALT and AST activities increased and that the liver SOD, CAT, GPx activities and GSH levels were decreased and the liver MDA levels were increased (P<0.05 ). It was found that in PCM+CH-25 and CH-50 groups compared to the PCM group, the serum ALP, ALT, AST activities were decreased and the liver SOD, CAT, GPx activities and GSH levels were increased and the liver MDA levels were decreased (P<0.05). It was concluded that both doses of CH treatments were effective on PCM-induced liver toxicity.