The goal of this study was to evaluate hepatic profile, lipidogram and glycemia in buffaloes and cows submitted to laparotomy and treated or not with phenylbutazone before surgery. Animals were arranged into 4 groups: G1 (7 cows): laparotomy + phenylbutazone 10mg/kg IV 1h before surgery; G2 (7 cows): laparotomy; G3 (7 buffaloes): laparotomy + phenylbutazone 10mg/kg IV 1h before surgery; and G4 (7 buffaloes): laparotomy. Blood samples were taken before surgery and 6h, 12h, 24h, 48h, 72h, 96h and 120h e 30 days after procedure. It were determined the serum levels of gamma-glutamyltransferase-GGT, aspartate transaminase-AST, alkaline phosphatase-ALP, cholesterol, HDL, triglycerides, and glucose. Statistical analysis was performed by use of Systat Software; the means were compared by Tukey test. Basal value (before surgery) of AST were higher in buffaloes (122±48U/L) than cows (54±10U/L) and the activity increased in both groups from 6h after surgery, with highest values at 24h (157±67U/L, in cows, and 204±74U/L, in buffaloes). However, had no influence of the phenylbutazone in AST activity in females submitted to laparotomy. Basal levels of ALP (122±48U/L to 182±104U/L) and GGT (19.67±4.10U/L to 30.60±6.15U/L) were similar in cows and buffaloes. Similarly to AST, had no effect of the phenylbutazone in ALP and GGT activity after laparotomy. Basal values of cholesterol were higher in cows (123±50mg/dL to 133±27mg/dL) than buffaloes (73±13mg/dL to 79±11mg/dL) and had no effect of the phenylbutazone. Basal levels of HDL and triglycerides were similar in cows and buffaloes (respectively, 48.1±15.8mg/dL to 67.2±7.4mg/dL and 29.9±14.2mg/dL to 41.8±19.0mg/dL), without influence of phenylbutazone. Basal glycemia were similar in cows and buffaloes (85±32mg/dL to 103±15mg/dL) and in cows treated with phenylbutazone the glycemia was constant. However, in cows non-treated glucose concentration increased, with highest value at 6-24h (116±19mg/dL to 122±18mg/dL). Similar increase was observed in treated buffaloes (95±40mg/dL to 106±40mg/dL) at 6-24h; in non-treated buffaloes was observed highest values at 6-72h (106±33mg/dL to 125±51mg/dL). In conclusion, had no influence of phenylbutazone administration in serum levels of AST, ALP, GGT, cholesterol, HDL, and triglycerides in cows and buffaloes submitted to laparotomy.

The authors thank FAPESP for the financial support.