

Title: SAFETY OF TULATHROMYCIN IN SHEEP

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Tulathromycin is widely used as extralabel in sheep, whereas there has no any data about safety in sheep. The aim of this research was to determine the safety of tulathromycin in sheep. In this research, single dose of 2.5 mg/kg tulathromycin was administered subcutaneously (SC) to 10 male yearling Merino sheep. Blood samples were obtained before (0. day, control) and after at 0.25, 0.5, 1, 2, 3, 4, 5, 6, 7, 8 and 9 days. Hemogram values (White blood cell, red blood cell, platelet, hemoglobin, hematocrit), and cardiac (Troponin I, creatine kinase-MB mass), hepatic (Alkaline phosphatase, total bilirubin, alanine aminotransferase, aspartate aminotransferase, gamma glutamyltransferase, total protein, albumin) and renal (Blood urea nitrogen, creatinine) damage markers were determined from blood samples. There were no any clinical changes observed in sheep during experimental period. Increased troponin I level was determined ($P<0.05$) at 1st day, while decreased red blood cell counts, hemoglobin and hematocrit levels were measured at 6th day when compared to control (0. day) values. Statistically significance changes ($P<0.05$) were determined within reference range in hepatic (Total bilirubin, alanine aminotransfrerase, aspartate aminotransferase, gamma glutamyltransferase, total protein, albumin) and renal (Blood urea nitrogen, creatinine) damage markers. In conclusion, tulatromycin may cause transient increase in the cardiac damage markers and changes in the blood picture. However, it is stated that single dose (2.5 mg/kg, SC) of tulatromisin may safe in sheep.

Keywords: Sheep, tulathromycin, safety

Biography

Orhan CORUM is a research assistant at University of Selcuk. He is still PhD student in the pharmacology department. He won scholarship at veterinary college of Dicle University. His

interest is cancer, pharmacokinetics and diabetes. Nowadays he is mostly cancer molecular studies.