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Toxicity Study of Piroxicam in Broilers

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SUMMARY. This project was designed for the evaluation of different effects of toxic dosage levels of piroxicam in broiler chickens. For this project, one hundred healthy broiler chickens were purchased from the market and were reared up to 28 days. These fifty birds were divided into two groups A and B, having twenty five birds in each group. On day 29th, group A was medicated with piroxicam twice a day at dose rate of 1 mg/kg body weight intra-muscularly (I/M) for four days. Birds from group B were kept as control. Feed and water were provided ad libitum. A physical examination was performed daily. Signs of toxicity and mortality rate in each group were recorded. Blood samples from wing vein (3 mL) was drawn on day 29 before medication and on days 33, 37, and 41 after medication, and on day 29 for the determination of serum values of aspartate transaminase (AST), alanine transaminase (ALT), uric acid, alkaline phosphatase (ALP), and creatinine. Postmortem performed on day 41 after all samples taken. In second experiment, other 50 birds were divided into two groups C and D comprising of 25 birds in each group. Each bird of group C was injected I/M piroxicam 2 mg/kg twice a day. Group D was kept as control group. Postmortem was performed after medication on 5th day. Based on the necropsy findings and biochemical analysis, it was found that piroxicam was safe drug (NSAIDs) in the avian species. Keeping in view the environmental problem (vultures crises), it is recommended that piroxicam which has good pharmacological effects in human medicine may be used instead of diclofenac sodium in veterinary practice.

KEY WORDS: LFT's, Necropsy, Piroxicam, Toxicity.

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