

Bioavailability of tylosin tartrate after flock medication via drinking water in broilers

Aqeel Javeed

Department of Pharmacology & Toxicology, Department of Clinical Medicine and Surgery, University of Veterinary and Animal Science, Pakistan

The present study was designed to determine the biological availability of Tylosin tartrate in broiler chickens. For this purpose, a microbiological assay was used to determine the biological availability of Tylosin tartrate in broiler chickens with *Bacillus subtilis* as the test organism. Sixty birds were divided into two equal groups A and B. Group A was medicated with Tyloexcel and group B with Tyleco soluble. Then blood samples were collected serially. Plasma concentration was found by using microbiological assay and the data was compared with published pharmacokinetic data. Stability of two products (using the same technique) showed both products were equally stable in water and no significant difference was observed between these two products. In the present study Maximum time (t_{max}) 2 hours for tylosin obtained after oral administration indicated that using this antibiotic with drinking water in broiler chickens was suitable method. However, relatively, low value of Maximum plasma concentration (C_{max} $1.28 \pm 0.030 \mu\text{g/ml}$ (Tyloexcel) and $1.2 \pm 0.025 \mu\text{g/ml}$ (Tyleco soluble) after oral administration of tylosin indicated that dosing of this antibiotic in chickens should be higher than in other food producing animals.

Biography

Aqeel Javeed has completed his Ph.D. at the age of 30 years from Institute of Zoology, Graduate School of Chinese Academy of Sciences, Beijing, P.R.China. He is working as Assistant Professor in the Department of Pharmacology & Toxicology, University of Veterinary and Animal Sciences, Lahore-Pakistan. He has published more than 26 papers in reputed journals. He has won Australian Endeavour Award in 2010.

aqeel.javeed@uvas.edu.pk