Cefquinome is a fourth-generation cephalosporin developed for exclusive use in animals (CVMP, 2003). It has a broad spectrum antibacterial activity, high stability against β-lactamase and enhanced potency and bioavailability. Therefore, it is a valuable antibiotic with potential use in treatment of various infectious diseases in camel. Studies on pharmacokinetics of different drugs in camel are limited, hence the doses of different drugs are usually extrapolated from those recommended for other animal species (Ali, 1998). Research reports suggest that activity of drug metabolising enzymes and the capacity to biotransform and eliminate xenobiotics in dromedary camel is lower than many other ruminants (Alquarawi and Ali, 2000). Therefore, pharmacokinetic studies to fix the appropriate dose rates are essential for rational use of any drug in this species. The present study was aimed to investigate the disposition of cefquinome following its single intramuscular administration in dromedary camel.

Materials and Methods

The study was carried out in 5 apparently healthy male dromedary camels in the age group of 3 to 4 years, weighing in between 400-450 kg. The experimental animals were kept under constant observation for 2 weeks prior to the experiment at National Research Centre on Camel, Bikaner, Rajasthan and examined periodically to exclude any possibility of localised or systemic disease. The animals were maintained under an intensive system of management and fed daily with guar (Cyamopsis tetragonoloba) meal (mixture of 30-33% hull, 27-30% endosperm, and 43-47% germ) and groundnut (Arachis hypogaea) haulms. The experimental protocol and ethical standards were followed as per guidelines of CPCSEA throughout the experiment.

Cefquinome sulphate (Cobactan 2.5% MSD Animal Health, Pune, India) was administered as single intramuscular dose of 1 mg/kg body weight in the caudal cervical epiaxial muscles located in the lower neck region after aseptic preparation of...