HAEMATOLOGICAL CHANGES-ACCOMPANYING PROLONGED OCULAR CHLORAMPHENICOL ADMINISTRATION IN LABORATORY RABBITS.

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Abstract

The toxic effect at ocular chloramphenical on hematological parameters was studied in laboratory rabbits; Oryctolagus cuniculus while the haemotoxic effect of oral chloramphenicol provided the basis for comparison. 20(male adult rabbits were randomly but equally divided into two main groups based on the route of administration of the drug (i,e ocular or oral), In each group of ten rabbits equal number of rabbits were randomly divided into test (n=5) and control (n=5)subgroups, Oral chloramphenicol was administrated at a dosage of 500mg twice daily for 21 days. Drops of ocular chloramphenicol were administered on the conjunctiva of the animals thrice daily over the same period of time. The control animals were administered with 0.9% physiological saline orally and distilled water administered 2)cllllinislerecj nelliarly. Ocular Chloramphenicol produced no significant changes in the heamatological parameters evaluated on the 11th and 22nd. Conversely oral chloramphenicol was observed to significantly (P< 0.05) reduce the mean total erythrocyte count, PCV, mean corpuscular heamoglobin, and neutrophils progressively by the 11th and 22nd days. Ocular chloramphenicol was confirmed to have no dose-dependent haemotoxic effect however the possibility of idiosyncratic aplastic anaemia is highlighted in this study.

Key words

Ocular chloramphenicol, haemotoxicity, Rabbits