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MORPHOLOGICAL EFFECTS OF CHRONIC ADMINISTRATION OF ZIDOVUDINE ON THE VISUAL RELAY CENTRES OF ADULT WISTAR RATS

INTRODUCTION: The oxidative stress effects in chronic administration of Zidovudine (ZDV) on vision had also been reported.
GOAL: To investigate how ZDV induced morphological changes in the tissues.
METHOD: The rats of both sexes (N=40), with an average weight of 200g, were equally but simple randomly assigned into treatment and control groups. Each animal in the treatment group received approximately 0.857mg/200g of ZDV twice daily (on the basis of 300mg/70kg bodyweight dosage).
RESULT/DISCUSSION: There was a significant ($p < 0.05$) increase in the weight of the treated superior colliculus and decrease in the weight of the treated lateral geniculate body as compared to their corresponding control group. The morphological changes were consistent with previous findings, which include cellular changes such as hypertrophy, unevenly distributed cellular population, and vacuolations in the stroma of the treated tissues as compared to the control group.
CONCLUSION: The toxic effects of ZDV on the morphology of the intracranial visual relay centers of the tested adult Wistar rats observed in this experiment may underline some of the possible neurological symptoms reported concerning ZDV treatments in human.
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Primary authors: Dr OMINDE, Beryl (Dr.); Prof. IGBIGBI, Patrick; Prof. ADJENE, Josiah

Presenter: Dr OMINDE, Beryl (Dr.)