

عنوان مقاله:

Toxic effect of acyclovir on testicular tissue in rats

محل انتشار:

مجله طب تولید مثل ایران, دوره 11, شماره 2 (سال: 1392)

تعداد صفحات اصل مقاله: 8

نویسندگان:

Elham Movahed - *Department of Biology, Faculty of Basic Sciences, Urmia University, Urmia, Iran*

Vahid Nejati - *Department of Biology, Faculty of Basic Sciences, Urmia University, Urmia, Iran*

Rajabali Sadrkhanlou - *Laboratory of Embryology, Department of Basic Sciences, Faculty of Veterinary Medicine, Urmia University, Urmia, Iran*

Abbas Ahmadi - *Laboratory of Embryology, Department of Basic Sciences, Faculty of Veterinary Medicine, Urmia University, Urmia, Iran*

خلاصه مقاله:

Background: Acyclovir (ACV), a synthetic purine nucleoside analogue, is known to be toxic to gonads. Objective: The current study evaluated cytotoxicity of ACV on histopathological changes in testis tissue and serum testosterone and lipid peroxidation concentrations of male rats. Materials and Methods: Animals were divided into five groups. One group served as control and one group served as control sham. In the drug treated groups ACV administered for 15 days. 18 days after the last injection, animals were sacrificed. Histopathological and histomorphometrical analysis of the testis was carried out. Serum levels of testosterone and Lipid Peroxidation and potential fertility of animals was evaluated. Results: Male rats exposed to ACV had significant reduction in serum testosterone concentrations at 16 and 48mg/kg dose-levels ($p < 0.01$). ACV induced histopathological changes in the testis and also increase the mean number of mast cells in peritubular or interstitial tissue in the testis at 16 and 48mg/kg dose-levels ($p < 0.01$). In addition ACV caused increase of serum level of Lipid Peroxidation at 48mg/kg dose-level ($p < 0.05$). As well ACV decreased potential fertility in male rats. Conclusion: The present results highly support the idea that ACV has adverse effect on the reproductive system in male rat.

کلمات کلیدی:

Acyclovir, Testis, Testosterone, Mast cells, Rat

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/488850>

