

P40. A DOSE–RESPONSE STUDY FOLLOWING IN VIVO EXPOSURE TO DI (2-ETHYLHEXYL)- PHTHALATE (DEHP): HISTOLOGIC, IMMUNO HISTOCHEMICAL, MORPHOMETRIC AND HORMONAL EFFECTS ON REPRODUCTIVE ORGANS IN PUBERTAL MALERATS

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The aim of this study was to investigate the effect of DEHP on there productive system of malerats. Pubertal 24 male Wistar albino rats were exposed to 100,200 and 400 mg/kg/day of DEHP by gavage for 28 days and at the end of the study, testes, epididymis, seminal vesicle and prostate gland were taken and investigated histopathologically. Also, in serum, testosterone was measured with testosterone kit. Seminiferous tubules of testis were scored for tubule diameter, lumen diameter and height of tubule epithelium. In testis, the Tunel method was applied and evaluated.

There was no significant difference between first and final body weights. In 200 and 400 mg/kg/day of DEHP, absolute right and left testes weights were decreased. DEHP exposure caused congestion, degeneration of tubules and tubular atrophy in testis, tight lumens of tubules, tubuleswithout sperm andless sperm in the lumen in epididymis, atrophic tubules and prostatic intraepithelial neoplasia in prostate and decrement of secretion and cells in the lumen in seminal vesicle. The testosterone was decreased in all treatment groups compared to the control group. There were shown apoptotic cells in the lumen of testes in dose groups with using Tunel method. Luminal diameter and tubular diameter were increased in 100 mg/kg/day of DEHP dose group compared to the other groups statistically significant. Epithelial length had the highest level in 400 mg/kg/day of DEHP dose group.

This study showed that DEHP has side effects on male reproductive system histologically and hormonal.

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