

SUMMARY AND CONCLUSION

The present study was conducted to study the effect of non steroidal antiandrogen flutamide, on the male genital organs, as position of the testis, spermatogenesis, internal genital organs and the external genitalia.

Fifty adult male rats were included in the study, they were divided into two groups.

- Group I (35 rats) : Divided into two subgroups.

- * Control group(5 rats) : The mothers of these rats were injected subcutaneous by propylene glycol 10 mg/day from the 10th day of gestation until birth.
- * Treated group(30 rats) : The mothers of these rats were injected subcutaneous by flutamide 10 mg/day from the 10th day of gestation until birth.

- Group II(15rats) : Divided into two subgroups:

- * Control group(5 rats): The male rats were injected subcutaneous by propylene glycol 5 mg/day from the day of birth till 14 day old.
- * Treated group(10 rats): The male rats were injected subcutaneous by flutamide 5 mg/day from the day of birth till 14 day old.
- * The rats when reached the adult age (14 – 20 weeks), they were sacrificed and examined for the external genitalia. Then the rats were dissected to examine and

prepare the internal genital organs for light microscopic study. Parts of the testes prepared for electron microscopic study also.

- * Statistical analysis were made between the weight of the testes, weight of the epididymis and the length of the ano-genital distance in the different groups of the study.
- * The present study confirmed that administration of the non steroidal antiandrogen flutamide to pregnant female rats from gestation day 10th to birth resulted in disturbance of the process of testicular descent in the male off spring. These male also exhibited reduced testicular weight, varying degrees of seminiferous tubule damage. The degree of damage was strongly correlated with the location of the testis, with scrotal testes being nearly normal, suprnigunal testes moderately affected and intra-abdominal testes severely affected.
- * The internal genital organs were affected with the absence of some organs as the seminal vesicles and feminization of the external genitalia.
- * The postnatal administration had no effect on the male genital system.