



Study on Epididymis histomorphometric of rat following the consumption of sesame seed

Erfanimajd Naeem¹, Hosseinifar Shima²

Iranshahi Rahman³

1. Professor, Department of basic science, Faculty of Veterinary medicine, Shahid Chamran University of Ahvaz, Iran
2. Assistant professor, Department of basic science, Faculty of Veterinary medicine, Shahid Chamran University of Ahvaz, Iran
3. Student of Histology, Department of basic science, Faculty of Veterinary medicine, Shahid Chamran University of Ahvaz, Iran

Introduction: Sesame is seed oil, which used in traditional medicine. Sesame containing large amounts of sesamin and sesamolignans that has phytoestrogenic effects and also contains Vitamin E. Then it can be effect on fertility. The aim of this study was to evaluate the effect of sesame seed on Histomorphometry of the epididymis in adult male rats.

Material and methods: 20 rats were divided into four groups; Control group 1: daily 24 grams pellet per rat, for 30 days; the control 2: diet as the first control group, for a period of 60 days; Treatment 1: 5.8 g sesame seeds and 19.5 g pellet daily for 30 day; Treatment 2: diet as the treatment 1, for 60 days. At the end experiment, rats were weighed and scarified. Epididymides were weighing and fixed in 10% formalin solution. After the usual stages of tissue processing, slides were stained by H&E method. Then slides were evaluated for histomorphometrical changes.

Results: Results showed that height of epididymal epithelium had increased in the group receiving sesame in compared with control group. In the group who received 60 days of sesame, height of epithelium showed a further increase than the group that received 30 days. Body and epididymal weight in the group fed with sesame seed increased significantly compared to the control group. It seems that sesame having antioxidant and phytoestrogens properties and can improve fertility in males through affecting on epididymis.

Keywords: Sesame, Epididymis, Histomorphometric, Rat