عنوان مقاله:

The effects of prepubertal epididymal ligation upon the rat testis

محل انتشار:

مجله طب تولید مثل ایران, دوره 12, شماره 10 (سال: 1393)

تعداد صفحات اصل مقاله: 8

نویسندگان:

Fatih Mehmet Gur - *Sabiha Gokcen Airport Veterinary Border Inspection Post, Ministry of Food, Agriculture and Livestock, ۳۴۹۱۲ Pendik, Istanbul, Turkey*

Sema Timurkaan - *Department of Histology-Embryology, Faculty of Veterinary Medicine, University of Firat, ۲۳۱۰۰ Elazığ, Turkey*

خلاصه مقاله:

Background: Previous researches about the effects of epididymal obstruction on the testes are contradictory, and the mechanism harmful effect of male duct system obstruction on seminiferous tubules still remains unclear.Objective: The aim of this study was to investigate the effects of epididymal obstruction in prepubertal rats on the testis.Materials and Methods: 15 days of age, the young rats were divided at random in two groups for epididymal ligation (n=25) or sham operation (n=15). Both groups were sacrificed at 21, 35, 56, 90, 120 days. The testis were removed, fixed in Bouin's fixative and embedded in paraffin wax. The tissues were sectioned at 5 µm and stained with haematoxylin-eosin and triple stain.Results: In ligated rats the first histological alterations were detected at 56 days. These degenerative changes included increase at the seminiferous tubule diameter and basal membrane thickness, decrease at the germinal epithelium thickness, depletion of spermatids and presence of multinucleated spermatids. In 90 and 120 days ligation groups; germ cells greatly reduced in number.Conclusion: progressive degenerative alterations occurred in the seminiferous tubules after prepubertal epididymal obstruction but these degenerative alterations are not observed until puberta and in the seminiferous tubules that showed extensive degeneration, seminiferous epithelium was composed mainly of Sertoli cells.

کلمات کلیدی:

Epididymis, Ligation, Degeneration, Testis, Rat