Morphological and histochemical changes in the epididymis of hamsters (Mesocricetus auratus) subjected to short photoperiod

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The morphological involution and histochemical changes of the Syrian hamster (Mesocricetus auratus) epididymis induced by a short light period were investigated. Under short-day conditions, the epididymis showed marked morphological changes including a decrease in luminal diameter, disappearance of spermatozoa, increase of interductal tissue, increase of intraepithelial lipofuscin deposits, the presence of phagolysosomes in the principal cells and macrophage-like cells, and a considerable modification of most clear cells. With lectin histochemistry changes were found in the glycoconjugates of principal cells of the regressed epididymis, either a decrease (PNA, WGA, HPA and DBA) or an increase (MAA) in the affinity of lectins to the Golgi area, or a decrease (HPA) or an increase (PNA) in lectin binding to stereocilia. Both morphological and histochemical results showed that, under this light condition, the cauda epididymidis presented the most prominent alterations, and that the epididy