

COLLAGEN AND ELASTIC FIBERS ACCUMULATION WITH
FIBROMUSCULAR STROMA PROLIFERATION IN LIBYAN JIRD
(*MERIONES LIBYCUS*) SEMINAL VESICLE DURING SEXUAL
QUIESCENCE OF REPRODUCTIVE CYCLE

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In the Libyan jird (*Meriones libycus*) the period of sexual quiescence programmed since the end of the summer until the end of the winter is associated with a strong regression of the seminal vesicle. This regression is characterized by an important ponderal falling down and an involution of the epithelium in which apoptosis affects a considerable number of cells; the remaining cells loose the apical cytoplasm and become cubic in shape. Numerous connective fibers accumulate in the interstitial compartments, more particularly in the widened axis of the epithelial folds. The histochemical and indirect immunohistochemical methods reveal the presence of some elastic fibers and type I and III collagen within the dense connective cluster. The immunolabelling of collagen I is particularly intense. The type I and III collagen placed in the connective stroma and along the epithelium are gathered in undulated and thick beams. The fibromuscular wall bordering the seminal vesicle shows a considerable growth with an increase in the number of widened smooth muscle cells orientated in all the directions.

During this period, the seminal vesicle becomes a quiescent gland in which connective and fibromuscular tissues predominate. This reorganization is probably linked to the modification of the hormonal balance and alteration of the interactions between the epithelium and connective stroma. This physiological plasticity allows us to save energy that can be used for some other physiological activities.