

Morphological study of the cervical salivary glands in the nine-banded armadillo

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The nine-banded armadillo (*Dasypus novemcinctus*, L.) has become the subject of great interest, since that species is the first unaltered animal model to develop human leprosy following inoculation with *Mycobacterium leprae*. Five adult nine-banded armadillos (*Dasypus novemcinctus*) of both sexes were used in this study. The animals were anesthetized with nembutal, and two pair of the glands were fixed in formalin solution at 10%, dissected and described. Tissues from three pair of the glands were fixed by Bouin's liquid; dehydrated in a graded series of alcohols, infiltrated and embedded in paraffin. The sections were stained with haematoxylin and eosin and Masson's trichrome. Two cervical salivary glands of big dimensions were distinguished in each animal. They are divided in lobes and show a presence of a salivary bladder, associated with the main ducts of the gland. The cervical salivary gland is surrounded by a fibrous capsule which consists of dense connective tissue, that is continuous with the interstitial connective tissue that consists of a loose connective tissue and divided the gland in such a manner that distinct lobules are evident histologically. The armadillo cervical salivary glands are typical mixed glands containing both mucous and serous elements, with mucous acini as the predominant secretory unit. It was possible, observed some myoepithelial cells, that are juxtaposed intimately to the secretory epithelial cells of the acini. The salivary bladder is composed of three distinct layers: an epithelium, a submucosa and a coat of skeletal muscle. This epithelium lining is composed by a principal and basal cells. The ductal system of these glands are divided into three segments, intercalated, secretory (striated) and excretory ducts. The intercalated and secretory ducts are located in connective tissue septa, whereas the excretory ducts are located in connective tissue between lobules. The results were compared to the other studies about salivary glands of the armadillo and of other mammals, and suggesting that the organization of the cervical salivary glands in the nine-banded armadillo is similar to that which characterizes the major salivary glands of the mammals.