

of transformation by means of enzymatic techniques of organ dissociation and subsequent transplantation of cell suspension into an ectopic site. For a few years we have been studying the harderian gland of CBA mouse as a potential model system of epithelial carcinogenesis. The organ is localized behind the eyeball of the animals that possess the nictitating membrane. Our observations on the ultrastructure of the gland are well in agreement with those made by Watanabe<sup>1</sup>. In fact we observe three cell types: myoepithelial, A and B secretory cells. Myoepithelial cells are located between the secretory cell base and the basement membrane. They are characterized essentially by the presence of cytoplasmic myofilaments, and are supposed to participate in the release of glandular secretion by contraction with a mechanism similar to one of mammary gland. Secretory cells A, with vacuoles apparently empty, are more numerous and have larger mitochondria than B cells. On the contrary, vacuoles of B cells contain a densely stained material, and sometimes they seem to coalesce. It is likely that A and B cells are involved in the secretion of lipids and pigment, respectively. After gland dissociation we have been able to find A and B cells well preserved. They show all the morphological characteristics above mentioned in cells observed *in situ*. Myoepithelial cells are absent in the scored sections: this can be ascribed to the relative paucity of this cellular type. At present we cannot exclude that the adopted enzymatic procedure has selected preferentially these cells. We are setting up a special technique to elucidate this point. Cellular suspensions have been tested *in vivo* for their capacity to proliferate in the interscapular fat pad of syngeneic hosts in short-term experiments. On the basis of evidence accumulated so far, a carcinogenesis experiment has been recently set up.

1. M. Watanabe, *J. Morphol.* 163 (1980) 349-65.

PRELIMINARY OBSERVATIONS ON THE ULTRASTRUCTURE OF THE BOWMAN'S GLANDS IN PODARCIS SICULA CAMPESTRIS DE BETTA (REPTILIA, LACERTIDAE)

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The positivity to PAS reaction, the lack of metachromasia and alcianophilia sustain the absence of acid mucopolysaccharides in the secretory products of the Bowman's glands in Podarcis sicula campestris. The Richardson's staining method shows equal staining of the granules in either alveolar or tubular portions.

The uniformity of the cellular population observed by light microscopy is confirmed on the electron micrographs. The cell membrane is provided with apical microvilli, scattered short expansions in the lateral surfaces, desmosomes and junctional complexes; its basal portion is placed on a well defined basal lamina. The nucleus is euchromatic and the cytoplasm contains bundles of tonofilaments. Though the cells show the same basic features, they differ from each other with respect to cytoplasmic density, widespread occurrence of the rough endoplasmic reticulum, number and size of the secretory granules. The granules have contents which differ in appearance with and without a thick rim or cap of denser material.

The secretory cells of the Bowman's glands in Podarcis sicula campestris can be considered as the serous bright cells of the same glands in Mammalian; cellular elements equivalent to the mucous dark cells of the Mammalian Bowman's glands were not found.

ULTRASTRUCTURAL STUDY OF THE EXTERNAL NASAL GLAND IN PODARCIS SICULA CAMPESTRIS DE BETTA (REPTILIA, LACERTIDAE)

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The external nasal gland in Podarcis sicula campestris is of the ramified tubulo-alveolar type as in all Squamata. By light microscopy and electron microscopy two different segments can be easily distinguished in the gland tubules: the proximal tract, formed by "striated cells", without a specific distribution of the secretory product, and the distal duct in which secretory cells are intercalated among "striated cells" which become progressively more numerous towards the proximal tract.

The nucleus of the secretory cells is endowed in the basal portion and contains diffuse chromatin and a promi-