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ABSTRACTS

170 UNUSUAL APICAL PROTUBERANCES OF THE SUPPORTING CELLS OF THE OLFACTORY EPITHELIUM OF RODENTS.

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The olfactory epithelium of mammals shows a degree of interspecific variability (1). Their surface seems to undergo changes associated with physiology and sex(2). Some species show peculiar protuberances in the free surface of the supporting cells(2,3). Ultrastructurally, we have found these protuberances in a rodent. They are seen only in some zones in the olfactory epithelium of *Cavia porcellus*. The ultrastructure of these protuberances differ little from those studied in insectivorous(3) and primates(2). These structures do not occur in every supporting cell. They show an apical body and a basal stem. There is two types of protuberances: mushroom-shaped and irregular-shaped. The body presents an agranular endoplasmic reticulum (ER) and abundant free ribosomes. The stem shows an evenly large amount of agranular ER. The functional significance of these structures is currently unknown. Physiological and morphological evidence suggest that the supporting cells could play an active role in the periferic mechanisms of the olfactory discrimination(2); possibly these luminal protuberances of the olfactory epithelium could participate in these mechanisms.

1)J.Anat.128,1,77.2)Am.J.Anat.147,433.3)Cell Tissue Res. 193, 175.