

Brazilian Oral Research

Print version ISSN 1806-8324

Abstract


[LIMA, Marta da Cunha](#); [SOTTOVIA-FILHO, Dagoberto](#); [CESTARI, Tania Mary](#) and [TAGA, Rumio](#). Morphometric characterization of sexual differences in the rat sublingual gland. *Braz. oral res.* [online]. 2004, vol.18, n.1, pp. 53-58. ISSN 1806-8324. doi: 10.1590/S1806-83242004000100010.

The presence of morphological differences in the sublingual gland of male and female adult rats was determined by morphometry. Absolute and relative glandular mass was 21% lower and 31% higher, respectively, in females than in males. The fractions of glandular volume occupied by the mixed acini, intercalated ducts and striated ducts did not differ significantly between genders; however, their absolute volume was respectively 29, 42 and 58% higher in males. Despite the differences in the volume of these morphological compartments, the number of cells did not differ significantly between genders, except for the excretory duct compartment, for which a larger number was observed in males. With respect to cell volume, 13, 33 and 47% higher volumes were observed in males for mucous acinar cells and striated and excretory duct cells, respectively, while a 38% higher volume of serous demilune cells was observed for females. The surface-to-volume ratio of acini and striated ducts was respectively 16 and 35% higher in females. Based on these results, we conclude that the sublingual gland of female rats possesses smaller acini, and shorter ducts whose caliber is narrower, smaller mucous acinar and larger serous cells than the ones found in the male gland, indicating the presence of sexual dimorphism as well as suggesting sexual differences in the quality of the secreted product.

Keywords : Sublingual gland; Rats; Sex characteristics.

[?abstract in portuguese](#) [?text in english](#) [?pdf in english](#)

services

-  custom services
-  Article in pdf format
-  Article in xml format
-  Article references
-  How to cite this article
-  Access statistics
-  Cited by SciELO
-  Similar in SciELO
-  Automatic translation
-  Show semantic highlights
-  Send this article by e-mail



All the content of the journal, except where otherwise noted, is licensed under a [Creative Commons License](#)

Sociedade Brasileira de Pesquisa Odontol^gica

Av. Lineu Prestes, 2227
Caixa Postal 8216
05508-900 S^o Paulo SP - Brazil
Tel./Fax: +55 11 3091-7810



bor@sbpgo.org.br