

Brazilian Oral Research

Print version ISSN 1806-8324

Abstract

RIBEIRO, Tiago Turri de Castro; SOTTOVIA, Andr?Dotto; CESTARI, Tania Mary and TAGA, Rumio. Morphometric study of the postnatal growth of the parotid gland of the mouse. *Braz. oral res.* [online]. 2006, vol.20, n.1, pp. 13-20. ISSN 1806-8324. doi: 10.1590/S1806-83242006000100004.

The growth of the mouse parotid glands during 7 and 35 days of postnatal life was studied by morphometric methods. The mass of the gland, the volume of each morphological compartment, and the cell number in each compartment were evaluated. The data obtained for each evaluated dimension were adjusted by an exponential equation, of the type Y = a.e^{k.x}, thus permitting the calculation of their mean duplication time (T_D) , i.e., an estimation of their growth rate. Analysis of the results showed a marked 1,424% increase in the gland mass during the whole studied period, with $T_D = 7.10$ days. This growth occurred by increases in absolute volume of acini, intercalated ducts, striated ducts, excretory ducts and stroma, with percentual increases of 3,048%, 417%, 2,662%, 2,594% and 367%, respectively, and T_{Ds} of 5.62, 11.71,

custom services

Article in pdf format

Article in xml format

Article references

How to cite this article

Access statistics

Cited by SciELO

Similars in SciELO

Automatic translation

Show semantic highlights

Send this article by e-mail

5.55, 5.47 and 14.45 days, respectively. Analysis of the cell number growth in each compartment showed increases of 1,904%, 285%, 1,228%, 1,090% and 286%, respectively, and T_{DS} of 6.62, 20.40, 7.19, 7.26 and 14.51 days, respectively. Based on the present results, we concluded that the growth of the mouse parotid glands from day 7 to day 35 of age occurred by intense cell accumulation, mainly in the acini, striated ducts and excretory ducts, with a growth rate sensibly higher than that of the intercalated ducts and stroma.

Keywords: Parotid gland; Growth and embryonic development; Regression analysis; Histology; Animals.

?abstract in portuguese ?text in english ?pdf in english

All the content of the journal, except where otherwise noted, is licensed under a Creative Commons License

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

€ Mail

bor@sbpgo.org.br