Anxiety and dry mouth

Ana Maria Trindade Gregio
Pontificia Universidade Catolica do Parana, Brazil

Hyposalivation, xerostomia and alterations in the saliva composition are important side effects related to the use of psychotropic, including the anxiolytics and antidepressants. The mechanism in which these side effects take place has still not been completely clarified; however, histomorphometric and gravimetric studies have been contributing to a better understanding of the cytotoxic effects of anxiolytics drugs on the salivary glands. This study histologically analyzed the parotid glands of Wistar rats that received two benzodiazepines (BZDs) (Lorazepam and Midazolan), associated or not with Pilocarpine (PILO), in order to quantify the number of nuclei of acinar cells (N). Ninety male Wistar rats were allocated to nine groups. Control groups received a saline for 30 days (C 30) or 60 days (C 60) and (PILO) for 60 days. Experimental groups received lorazepam (L 30) and midazolam (M 30) for 30 days, lorazepam (LS 60) and midazolam (MS 60) associated with saline for 60 days and lorazepam (LP 60) and midazolam (MP 60) associated with PILO for 60 days. ANOVA and Games-Howell tests were used for statistical analysis. The L 30 and M 30 groups presented less N than did the S 30 group (p<0.05). The LS 60, MS 60 and LP 60 groups presented less N than did the S 60 and P 60 groups (p<0.05). No differences could be observed between the MP60 and S60 groups. The administration of Midazolam and Lorazepam reduced acini which may as well have collaborated in the reduction of salivary flow previously verified. The association of Midazolam with Pilocarpine led to the reestablishment of acinar cells, which may have favored the restoration of the salivary flow rate.

Biography

Ana Maria Trindade Gregio has done her B-Pharmacy, M Sc and PhD at UNICAMP, Campinas, Brazil. She worked as a Full Professor at PUCPR/ Brazil. Currently she is pursuing Post-doctoral studies at The University of Toledo, USA. She is a Full Professor of the Pharmacology in the Dentistry College at PUCPR. Her Post-PhD is regarding BZD action on parotid gland and signaling of proteins on the hypo-salivation. She has 68 papers and 4 chapters and at present is preparing a book on mouth ulcer and treatment. Furthermore, she has 2 patents, one of them is about dry mouth and Pilocarpine and another, Medicinal plants and repair process in mouth.

ana.gregio@pucpr.br

Notes: