



Efficacy of topical sialogogues in the treatment of Xerostomia in chronic residents of the C.H.P.L.

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Introduction

Institutionalized patients with psychiatric disorders are more susceptible to developing oral diseases, due to the administration of Antipsychotics and other medications, including first generation antipsychotics, second-generation antipsychotics, anticholinergics may often disturb the saliva secretion and cause drug induced hyposialia. The long-term use of xerogenic drugs can lead to physiological changes in the salivary glands, compromising their function/secretion and subsequently causing mouth dryness (xerostomia) associated with hyposialia . This dramatically can cause negative impacts in oral health and quality of life of the patients since the saliva performs as a physical barrier because of its numerous immune and nonimmune defense components. In this context, it is crucial to achieve acknowledgement concerning effective and accessible strategies that can improve the symptoms of drugs induced xerostomia in this vulnerable population (Barbe *et al.*,2018; Carmona-Huerta *et al.*,2019; Goud *et al.*, 2021, Teoh *et al.*, 2019; Wolff *et al.*, 2017) .

Aims

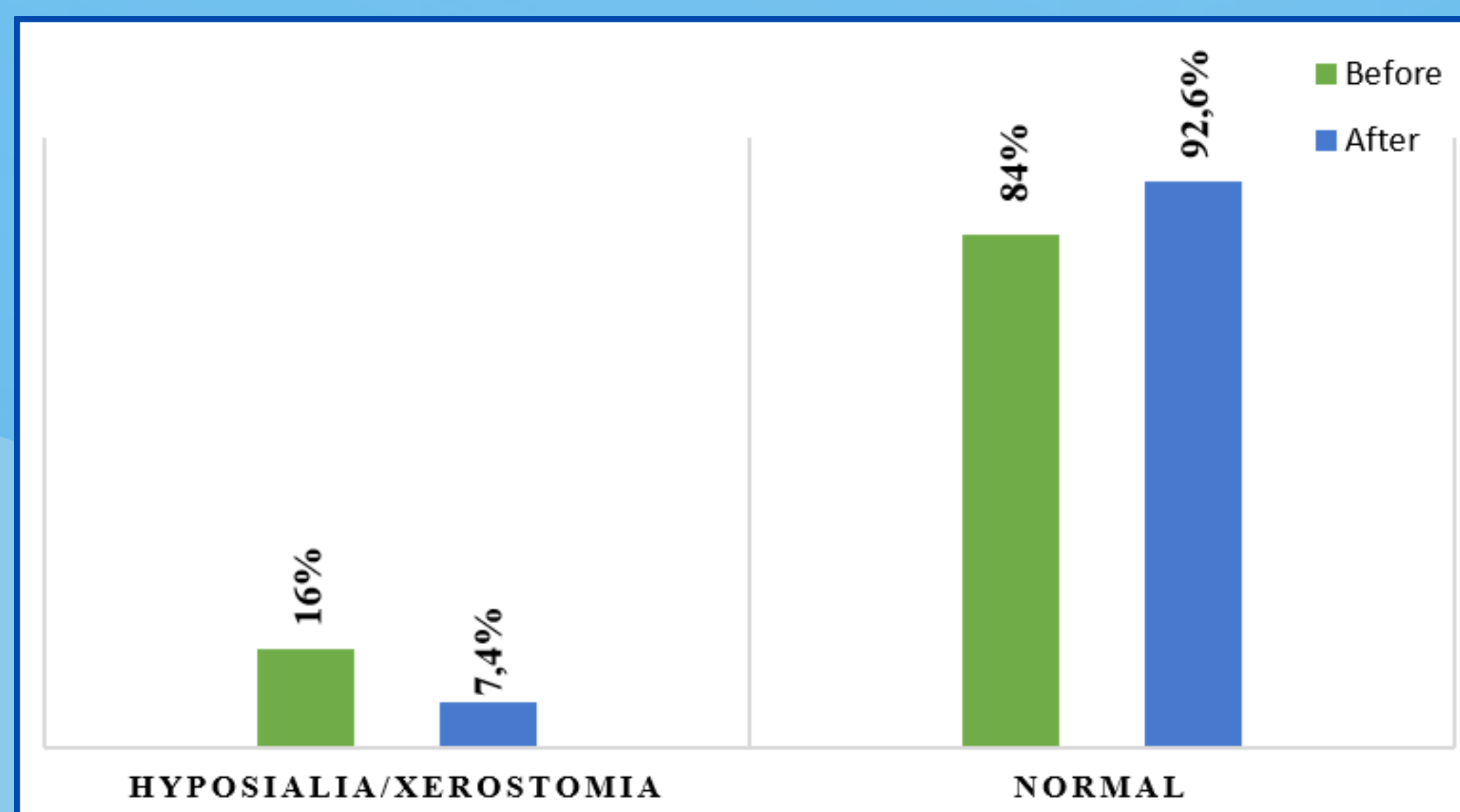
The aim of the study is to evaluate the effectiveness of topical sialogogues in institutionalized patients with drugs induced xerostomia at the Lisbon Psychiatric Hospital Centre (C.H.P.L.).

Materials and Methods

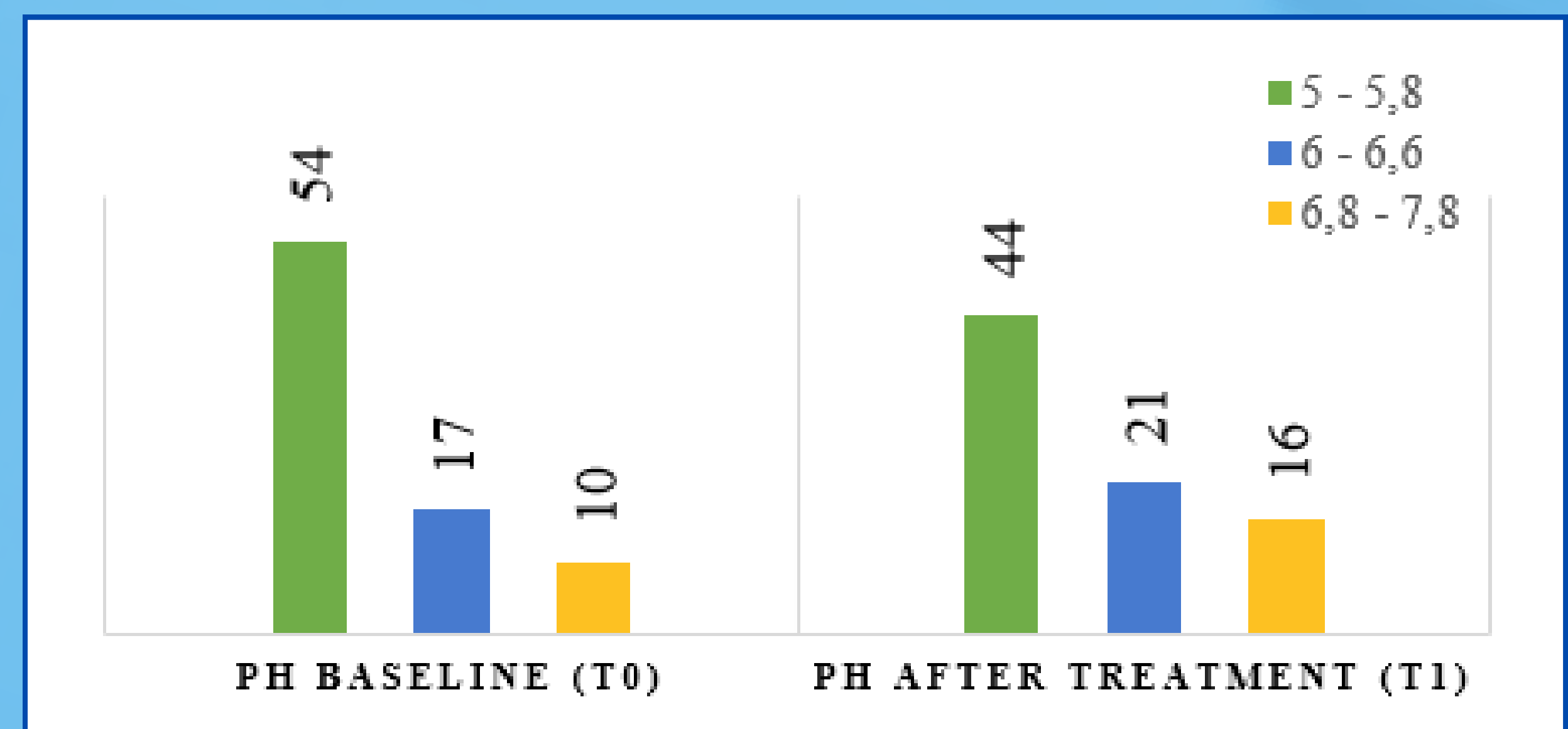
A cross-sectional study, 81 institutionalized of the General Psychiatry at the C.H.P.L., of both genders, aged between 18 and 85 years who consented to participate in this study. Approved by the Ethics Committee of the Lisbon Psychiatric Hospital Centre and the Instituto Universitário Egas Moniz. Subsequently, a questionnaire was applied regarding sociodemographic variables and sialometry was performed for unstimulated (USFR) and stimulated (SSFR) salivary flow rates and *Saliva Check-buffer®* in T0 and T1 with a 15-day interval. During this period, have administered the topical sialogogue *Xeros Dentaïd Gel®*, containing betaine (1%), aloe vera (0.05%), xylitol (10%) and sodium fluoride (0.0033%), twice per day. Hyposalivation was considered when USFR <0,1 mL/min and/or SSFR <0,7 mL/min. A statistical analysis was performed using the software IBM SPSS® Statistics.

Results & Conclusions

The average age of the population was 47.83 ± 15.39 years, most prevalent gender was males (81.5%). The prevalence of xerostomia decreased from 16% to 7.4% after administration of the topical sialogogue (Graphic 1). Regarding USFR and SSFR, there ´s significant improvement in salivary flow rates, 0.28 ml/min and 0.15 ml/min (p< 0.001), respectively and the pH values increased significantly (Graphic 2). Thus, the saliva buffer capacity remains unaltered. The administration of Antipsychotics medications mostly causes adverse drugs effect leading the mouth dryness (xerostomia) because of hyposalia compromising patients quality of life but the administration of the topical sialogogue over a period of 15 days have showed to be effective in increasing salivary flow rates (USFR and SSFR), as well as saliva pH.



Graphic 1. Distribution of xerostomia prevalence before and after treatment.



Graphic 2. Salivary pH before (T0) and after (T1) treatment.

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