Effects of gustatory stimulants of salivary secretion on the pH and stimulation of saliva of Sjögrens syndrome patients

Submission date	Recruitment status	Prospectively registered
03/01/2010	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
16/03/2010	Completed	☐ Results
Last Edited	Condition category	Individual participant data
16/03/2010	Musculoskeletal Diseases	Record updated in last year

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Prof Antonio Mata

Contact details

Grupo de Investigação em Biologia e Bioquímica Oral Faculdade de Medicina Dentária da Universidade de Lisboa Cidade Universitária Lisbon Portugal 1649-003 admata2@yahoo.com

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

N/A

Study information

Scientific Title

Effects of gustatory stimulants of salivary secretion on the pH and stimulation of saliva of Sjögrens syndrome patients: a two arm parallel single centre randomised controlled trial

Study objectives

Gustatory stimulants of salivary secretion (GSSS) are sold over the counter in wide number of European countries and used to stimulate salivary secretion. The acidic nature of these lozenges suggests that they may increase the risk for dental erosion.

The rationale for this study being to find out if the use of the Dentaid GSSS increases salivary secretion and is safer regarding dental erosion.

The study hypotheses are:

- 1.There is a significant difference in the salivary pH variation elicited by the new GSSS in patients with Sjögrens syndrome
- 2.There is a significant difference in the stimulation of whole saliva secretion capacity elicited by the new GSSS with patients with Sjögrens syndrome

Ethics approval required

Old ethics approval format

Ethics approval(s)

Ethical Committee at the Faculty of Dentistry of the University of Lisbon and the Portuguese Institute for Rheumathological Diseases approved in December 2009

Study design

Two-arm parallel single centre triple-blind randomised controlled trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Other

Study type(s)

Treatment

Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

Health condition(s) or problem(s) studied

Primary Sjögren's syndrome

Interventions

Salivary buffering capacity will be assessed in all participants at baseline. The participants will randomly be allocated to the control and intervention arms in equal numbers (40 in each arm):

- 1. Intervention arm: New Gustatory stimulant of salivary secretion one lozenge of Dentaid® (Dentaid, Spain)
- 2. Control arm: Traditional, citric acid based gustatory stimulant of salivary secretion one lozenge of SST® (Sinclair, UK)

Salivary secretion rate and pH changes will be recorded at defined time intervals (minute 0, 1, 2, 3, 5, 8, 10, 15 and 20) to determine the efficacy of saliva stimulation and dental erosion potential of these lozenges.

Intervention Type

Drug

Phase

Not Applicable

Drug/device/biological/vaccine name(s)

Dentaid®, SST®

Primary outcome measure

Time of GSSS induced pH drop below 5.5 expressed in minutes as the mean \pm 95% confidence interval. In order to better quantify risk differences of GSSS induced pH drop below 5.5 a contingency table compiling the counts of subjects with pH drops below 5.5 for over one minute will be obtained. Additional analyses will be done to calculate association measures like the absolute risk reduction (ARR) and number needed to treat (NNT).

Secondary outcome measures

- 1. GSSS induced salivary pH variations expressed as the mean \pm 95% confidence interval of the three pH measures obtained from salivary samples at defined time points
- 2. GSSS stimulated salivary flow expressed in ml/min as the mean \pm 95% confidence interval of stimulated salivary flow obtained at different time points
- 3. Overall stimulated salivary flow will also be calculated and expressed in ml/min as the mean \pm 95% confidence interval of the total volume of stimulated saliva divided by the total time of each experiment which will be 20 minutes
- 4. Salivary stimulation output defined as the difference between GSSS and basal salivary flow, expressed as ml/min

Overall study start date 07/01/2010

Completion date 07/10/2010

Eligibility

Key inclusion criteria

- 1. Participants (both males and females) above 18 years
- 2. Suffering from primary Sjögren's syndrome
- 3. An unstimulated whole saliva flow less than 0.1 mL/min, and a stimulated whole saliva flow greater than 0.2 mL/min

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Sex

Both

Target number of participants

80

Key exclusion criteria

- 1. Currently taking xerostomic medication
- 2. Pregnant

Date of first enrolment

07/01/2010

Date of final enrolment

07/10/2010

Locations

Countries of recruitment

Portugal

Study participating centre

Grupo de Investigação em Biologia e Bioquímica Oral

Lisbon

Portugal 1649-003

Sponsor information

Organisation

Dentaid, S.L. (Spain)

Sponsor details

Oficinas centrales Ronda Can Fatjó, 10 Parc Tecnologic Del Valles Cerdanyola Barcelona Spain 08290 dentaid@dentaid.es

Sponsor type

Industry

Website

http://www.dentaid.com/

ROR

https://ror.org/02n9shp96

Funder(s)

Funder type

Industry

Funder Name

Dentaid, S.L. (Spain)

Results and Publications

Publication and dissemination plan

Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration