

BRIAN SIMPSON, D.M.D.

DIPLOMATES OF THE AMERICAN BOARD OF ORAL & MAXILLOFACIAL SURGERY

113 NORTH MIDDLETOWN ROAD NANUET, NY 10954 (845) 623-3497 FAX (845) 623-4039 www.drbrriansimpson.com

Lycopene-Enriched Virgin Olive Oil Spray for Treatment Of Medication-Induced Xerostomia

Xerostomia is a subjective sensation of dry mouth. The most common form of xerostomia is medication induced. Many commonly prescribed drugs induce hyposalivation, including anti-hypertensive, diuretics, bronchodilators, proton pump inhibitors, antihistamines, antidepressants, and antipsychotics. Currently available saliva stimulating drugs produce a variety of adverse effects in patients with systemic diseases.

Researchers conducted a randomized, double-blind, placebo-controlled clinical trial of 60 patients diagnosed with xerostomia attending the Department of Oral Medicine (Faculty of Medicine and Dentistry, University of Murcia, Spain), to test whether the antioxidative effects of lycopene-enhanced extra virgin olive oil applied as a spray would offer a safe and effective treatment for medication-induced dry mouth compared with a placebo spray. They published their findings in the February

2017 issue of Journal of Oral Pathology and Medicine.

The study sample included 60 patients (7 Men, 53 Women) with medication-induced xerostomia. Inclusion criteria included older than 18 years, dry mouth more than 3 months duration, response of at least 3 centimeters (of 10) on a visual analog scale (VAS) to the query "Do you feel that your mouth was continuously dry for over 3 months?" and unstimulated salivary flow under 1.5 mL/15 minute. Exclusion criteria included hypersensitivity to any components of study materials, history of head and neck radiation therapy, diagnosis of Sjögren syndrome, and pregnancy or lactation.

Patients were divided equally into the intervention or placebo group. Participants in the intervention group received a 250-mL spray container with extra virgin olive oil with lycopene 300 parts per million. Participants in the placebo group received a similar container, which included water

and dye but no active ingredients. All patients were instructed to apply the product as a spray (1.5 mL) intraorally 3 times daily for 12 weeks. Unstimulated salivary flow was measured in all patients at 0 and 12 weeks. All patients completed the 7-item VAS at 0 and 12 weeks to evaluate xerostomia symptoms, and they responded to the Oral Health Impact Profile (14-item version) assessing changes in patient quality of life at 0 and 12 weeks.

After 12 weeks, an increase in unstimulated salivary flow rate was demon-

strated both in the intervention group (P=.001) and in the placebo group (P=.003). Statistically significant differences were noted in the intervention group after 12 weeks for VAS item 1 "rate the difficulty you experience in the speaking because of dryness" (P=.03), item 3 "Rate how much saliva is lacking in your mouth" (P=.03) and item 6 "Rate the dryness of your lips" (P=.04). Analysis of Oral Health Impact Profile (14-item version) results demonstrated a significant difference in the intervention group after 12 weeks of treatment

DENTAL FUN FACT

DID YOU KNOW...

YOUR TOOTH ENAMEL'S THE STRONGEST SUBSTANCE IN YOUR BODY. NOT EVEN YOUR LEG BONES ARE STRONGER!

(<http://ppdsmile.com/10-fun-dental-facts-for-kids/>)

NEWS YOU CAN USE

Comparative Costs of Oral Antibiotics

<u>Antibiotic</u>	<u>Cost Per Week</u>	<u>Amoxicillin Cost Ratio</u>
Amoxicillin 500 tid	\$11.99	1.00
Penicillin V 500 qid	\$18.59	1.55
Augmentin 875 bid	\$48.99	4.09
Cefdinir® 300x2 qd	\$61.59	5.14
Clindamycin 150x2 qid	\$27.69	2.31
Metronidazole 500 qid	\$29.69	2.48
Moxifloxacin 400 qd	\$102.99	8.59
Linezolid 600 bid	\$2,223.99	185.49

(P=.001) but none in the placebo group (P= .10)

The goals of treating dry mouth are to enhance salivary secretion and alleviate symptoms without producing side effects. The researchers found that spray applications

of lycopene-enhanced olive oil were effective in ameliorating multiple symptoms of dry mouth, improving salivary flow rate, and patient quality of life. A statistically significant difference between the intervention and placebo intergroup com-

parative analysis was not demonstrated. Thus, it is possible that topical spray itself led to some relief of symptoms, whether it contained the active ingredient or not.

Dr. Brian Simpson
announces the thirty seventh meeting of the
NANUET IMPLANT STUDY GROUP

Speaker: John Sconza, DDSS
Digital Dentistry Specialist
Zimmer Biomet, Warsaw, IN

**“New Technologies for Restoring
Dental Implants”**

Thursday, March 14, 2019

Dinner: 6:30 Presentation: 7:00 — 9:00 pm

Hudson House 134 Main Street Nyack, NY

2 CE credits awarded by the Ninth District Dental Association

Cost: \$50.00

To register, please call: 845-623-3497 or email: office@drbriansimpson.com

“Don't watch the clock; do what it does. Keep going.”

-Sam Levenson