



OZONE

in dentistry

SEPTEMBER 18,19, 2020 - Module 5: OZONE

HANDS-ON!

everything OZONE!

research and published articles galore!

caries

surgery

nasal insufflation

ear insufflation

pterygoid plexus injections

TMJ injections

lymph injections

scar injections

ozonating oil and water

autohemotherapy

trigger points

neural therapy

case studies

and more...



orthotic and ozone effective in managing TMJ pain

Cranio, 2017 Oct 24;1-9. doi: 10.1080/08869634.2017.1388906. [Epub ahead of print]

Management of pain in TMD patients: Bio-oxidative ozone therapy versus

O3 an alternative to antibiotics

O3 saline reduces 99% of bacteria in 15 minutes

Int Wound J, 2016 Oct;13(5):936-42. doi: 10.1111/ijwj.12412. Epub 2015 Jan 14.

Ozonated saline shows activity against planktonic and biofilm growing Staphylococcus aureus in vitro: a potential irrigant for infected wounds.

Al-Saadi H¹, Potapova I¹, Rochford ET¹, Moriarty TF², Messmer P³.

Author information

Abstract

Infections associated with deep wounds require extensive surgical and medical care. New adjunctive treatments are required to aid in the eradication of the bacterial biofilms found on infected wounds and, in particular, any underlying hardware. Ozone has been used as a safe and efficient disinfectant in water treatment plants for many years. The purpose of this study is to investigate the anti-biofilm potential of ozonated saline against biofilms of Staphylococcus aureus, a microorganism commonly implicated in wound infections. A custom-made bacterial biofilm bioreactor was used to grow S. aureus biofilms on discs of medical grade titanium alloy. An ozone generator was connected in-line and biofilms and planktonic bacteria were exposed to ozone in saline. Cytotoxicity was assessed against primary ovine osteoblasts in the same system. In tests against planktonic S. aureus, a 99% reduction in bacterial numbers was detected within 15 minutes of exposure. S. aureus biofilms were significantly more resistant to ozone, although complete eradication of the biofilm was eventually achieved within 5 hours. Ozonated saline was not found to be cytotoxic to primary ovine osteoblasts. Ozonated saline may be suitable as an adjuvant therapy to treat patients as an instillation fluid for wound irrigation and sterilisation.

O3 improves PI treatments

J Periodontal Implant Sci, 2018 Jun 30;48(3):136-151. doi: 10.5051/jpis.2018.48.3.136. eCollection 2018 Jun.

The eff

implant

Isler SC¹, U

Author

Abstract

PURPOSE

implantitis

gaseous o

METHODS

implantitis

therapy of

Clinical an

regenerati

RESULTS:

ozone-tre

mm at the

at the 12-

defect fill

the contro

CONCLUS

showed cl

O3 reduces adhesion of bacteria to Ti and Zirconia

Clin Oral Investig, 2012 Aug;16(4):1049-59. doi: 10.1007/s00784-011-0603-2. Epub 2011 Aug 13.

Influen

respons

Hauser-Ge

Author

Abstract

PURPOSE

Dental im

peri-impla

regenerati

bacteria a

ozone-tre

as substra

test specir

ultrasoni

morpholog

inspected

75% less

limit (>99

>90% rec

osteoblast

lower colo

efficacy to

cells. This

revealed

The effects of ozone therapy as an adjunct to the surgical treatment of peri-implantitis.

Isler SC¹, Unsal B¹, Soysal T

Author information

O3 effective tx of PI

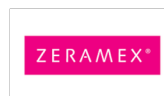
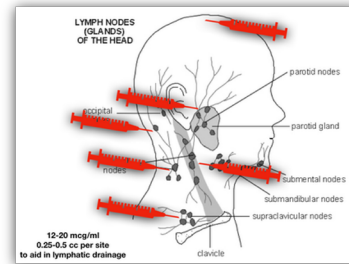
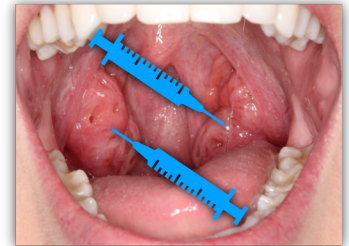
Abstract

PURPOSE: The decontamination procedure is a challenging aspect of surgical regenerative therapy (SRT) of peri-implantitis that affects its success. The purpose of the present study was to determine the impact of additional topical gaseous ozone therapy on the decontamination of implant surfaces in SRT of peri-implantitis.

METHODS: A total of 41 patients (22 males, 19 females; mean age, 53.55±8.98 years) with moderate or advanced peri-implantitis were randomly allocated to the test group (ozone group) with the use of sterile saline with additional ozone therapy or the control group with sterile saline alone for decontamination of the implant surfaces in SRT of peri-implantitis. Clinical and radiographic outcomes were evaluated over a period of 12 months.

RESULTS: At the 12-month follow-up, the plaque and gingival index values were significantly better in the ozone group (P<0.05). Probing depth decreased from 6.27±1.42 mm and 5.73±1.11 mm at baseline to 2.75±0.7 mm and 3.34±0.85 mm at the end of the 12-month observation period in the ozone and control groups, respectively. Similarly, the clinical attachment level values changed from 6.39±1.23 mm and 5.89±1.23 mm at baseline to 3.23±1.24 mm and 3.91±1.36 mm at the 12-month follow-up in the ozone and control groups, respectively. According to the radiographic evidence, the defect fill between baseline and 12 months postoperatively was 2.32±1.28 mm in the ozone group and 1.17±0.77 mm in the control group, which was a statistically significant between-group difference (P<0.05).

CONCLUSIONS: Implant surface decontamination with the additional use of ozone therapy in SRT of peri-implantitis showed clinically and radiographically significant. Trial registry at ClinicalTrials.gov, NCT03018795.



Presented by: Judson B. Wall, DDS
Holistic Dental Education, LLC
235 S. 400 E.
Bountiful, UT 84010
801-298-1812
holisticdentaleducation.com



TO REGISTER:
holisticdentaleducation.com/
courses
or call: 801-298-1812
\$1895 - 16 CE credits