



Ozosan[®] gel

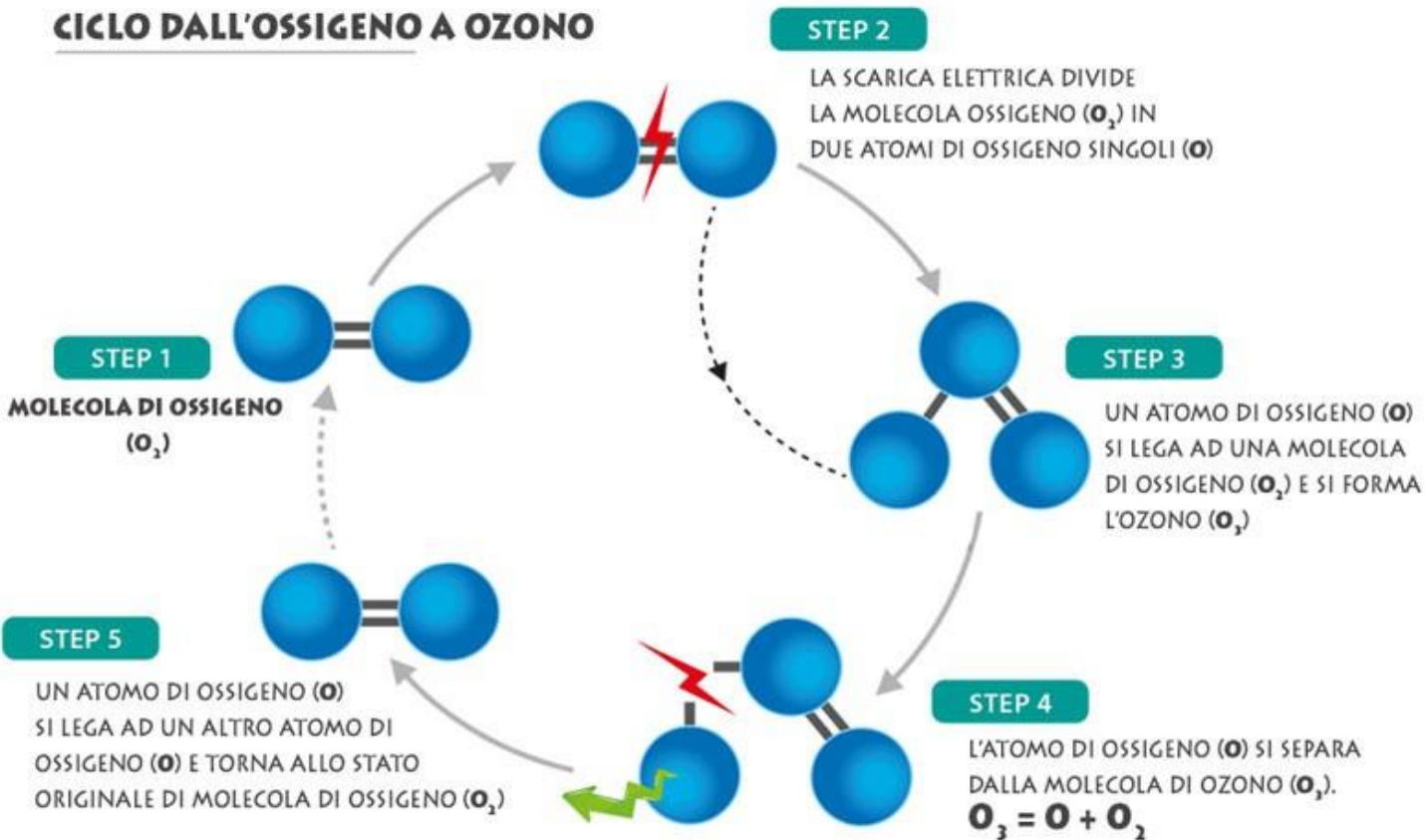
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Ozosan[®] gel



CICLO DALL'OSSIGENO A OZONO





GENERAL CONCEPTS AND USE

Oxygen-Ozone-Therapy consists in the use of a mixture of oxygen and ozone.

It's a therapy that dates back to the early 1900s and has undergone multiple evolutions over time, based on scientific research that testifies to its effectiveness and reliability in the medical field.

In Dentistry important benefits are obtained in surgery, implantology, treatment of osteonecrosis, bacterial stomatitis, prevention of alveolitis, mouth ulcers, adjuvant in the treatment of periodontitis and peri-implantitis.

Ozone is a very powerful natural decontaminant that facilitates wound healing and, therefore, the patient's use of antibiotics can be reduced.



ELSEVIER



Efficacy and safety of medical ozone (O_3) delivered in oil suspension applications for the treatment of osteonecrosis of the jaw in patients with bone metastases treated with bisphosphonates: Preliminary results of a phase I–II study ☆

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Ozone therapy for treatment of Medication-Related Osteonecrosis of the Jaw

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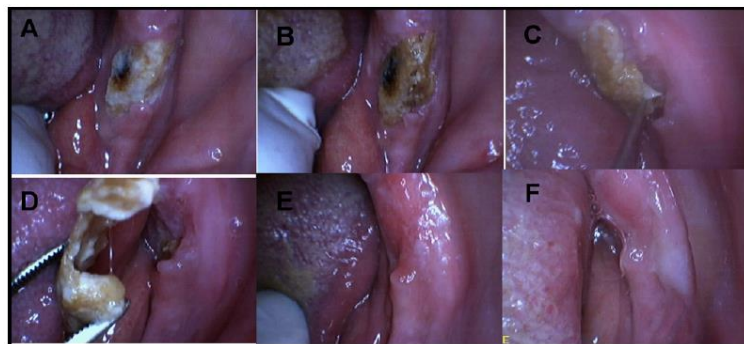


Figure 1 From beginning of therapy with medical O_3 oil to complete removal of bone sequestrum and reepithelialisation. Reports a clinical case at different time points from T0 at diagnosis of ONJ, before start of therapy (A) to the time of complete wound healing with reepithelialisation of oral mucosa (F). This patient presented at T0 with an osteonecrotic lesion of 11.09 × 8.5 mm (A). As per protocol, the patient was pre-treated for 10 days with antibiotics (Azitromicine, 500 mg/day) and then with four applications of medical O_3 oil. The osteonecrotic bone sequestrum was easily removed by the dentist using an anatomical pincer, without pain or bleeding (D). The mucosal tissue underneath the bone sequestrum was completely healed and reepithelialised with regenerated epithelial tissue (E–F). Pathological examination of the necrotic bone sample confirmed the clinical evidence of necrosis.

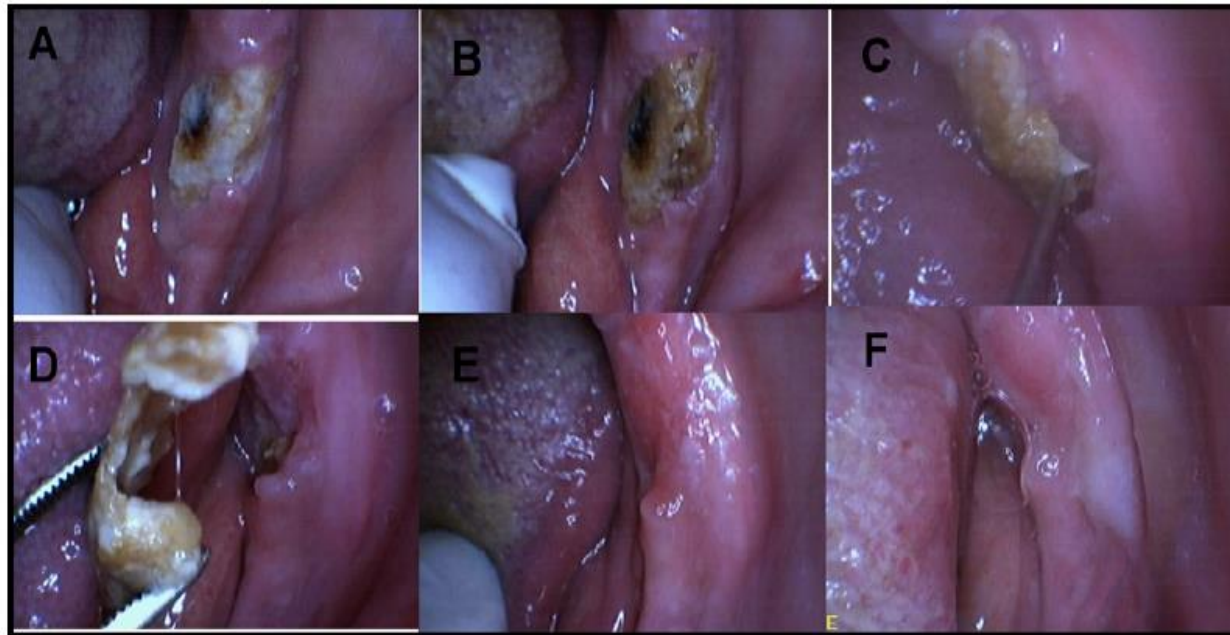


Figure 1 From beginning of therapy with medical O₃ oil to complete removal of bone sequestrum and reepithelisation. Reports a clinical case at different time points from T0 at diagnosis of ONJ, before start of therapy (A) to the time of complete wound healing with reepithelialisation of oral mucosa (F). This patient presented at T0 with an osteonecrotic lesion of 11.09 × 8.5 mm (A). As per protocol, the patient was pre-treated for 10 days with antibiotics (Azitromicine, 500 mg/day) and then with four applications of medical O₃ oil. The osteonecrotic bone sequestrum was easily removed by the dentist using an anatomical pincer, without pain or bleeding (D). The mucosal tissue underneath the bone sequestrum was completely healed and reepithelialised with regenerated epithelial tissue (E-F). Pathological examination of the necrotic bone sample confirmed the clinical evidence of necrosis.

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ORAL HYGIENE

- Gingivitis
- Mucositis
- Mouth sores



PERIODONTICS

- General periodontal disease
- Periodontal surgery
- Gingival recession



IMPLANTOLOGY

- Peri-implantitis
- Decontaminant prior to:
 - ▶ implant placement
 - ▶ placement of healing caps
 - ▶ placement of prosthetic abutments



ORAL SURGERY

- Apicectomy
- Dry socket
- Maxillary sinus lifting
- Extractions
- Surgical wounds
- Osteonecrosis

How it works:

- It breaks down the double bonds between carbon atoms of the cell walls by means of oxidation and causes the death of the micro-organism in seconds

The literature confirms that it:

- destroys 100% of micro-organisms in dental caries or periodontal lesions.
- The ozone concentration in Ozosan gel is enough to destroy bacterial cells including spores.

Functions:

- antimicrobial
- virucidal
- anti-inflammatory
- bactericidal
- fungicidal
- biostimulant (neoangiogenesis)

Ozosan[®] gel



The sunflower oil-based gel is the essential part of the product.

This holds the right amount of ozone stable and ready for use directly at the site to be treated.

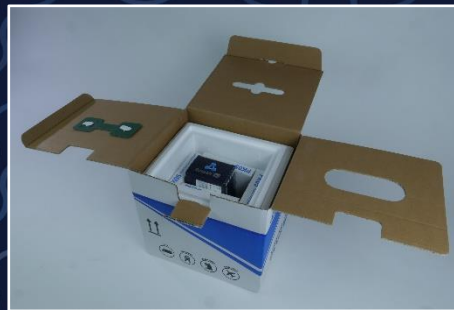
Ozosan[®] gel



Another feature that characterises Ozosan Gel is the “**cold chain**” – this distinctive aspect guarantees the stability of the ozone in the gel.

At all stages of the supply chain (manufacture/storage/packing/transportation) the product is kept at a controlled temperature.

When the product reaches the clinic, it must be kept in the fridge (4°–12°) and has a shelf life of 36 months.



T. Zero – Afta Major 1,3 cm



11 days later – 3 applications



Ozosan[®] gel

T. Zero



7 days later – 3 applications



T. Zero - Fistula



48h later - 1 application



Post-extraction alveolus with tissue healing by secondary intention

- OsteOXenon Bioteck - equine origin bone granules
- Xenomatrix Bioteck - connective matrix of equine origin
- Ozosan Gel

T. Zero : biomaterials + suture



1 week later: stitches removal



10min. after Ozosan Gel application



Ozosan[®] gel

Standard tissues healing by second intention
at 1 week



With Ozosan Gel



Mucositis on implant placed in 2002

- Tartar ablation
- Air polish
- Ozosan Gel application

T. Zero



10 min. later



Avulsion and simultaneous implant placement in guided surgery

T. Zero - Application of Ozosan Gel inside the mask during the surgery



4 days later: healing by second intention



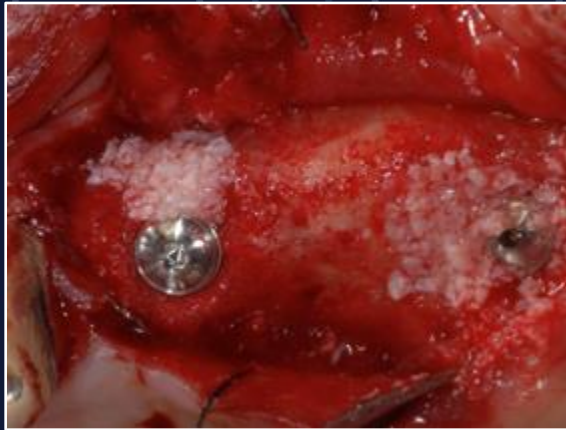
T. Zero: avulsion, suture and Ozosan Gel placement



1 week later : tissue healing



Smoker who uses biphosphonates



Implant placement and
regeneration



Suture and Ozosan Gel on
the wound



3 weeks later : tissue
healing

Extended periodontitis with II° mobility on 22 and probing of 09 mm

The patient takes cardioaspirin and calcium channel blockers



T. Zero: smoothing and Ozosan Gel



T. 1 week later : marked improvement of the tissues

T. 3 week later: Ozosan Gel application every two days - the tooth no longer has mobility

Herpes labialis



T. Zero



Ozosan Gel application



24h later

Ozosan[®] gel

Herpes labialis



T. Zero



T. 15h later

Picking up from the palate



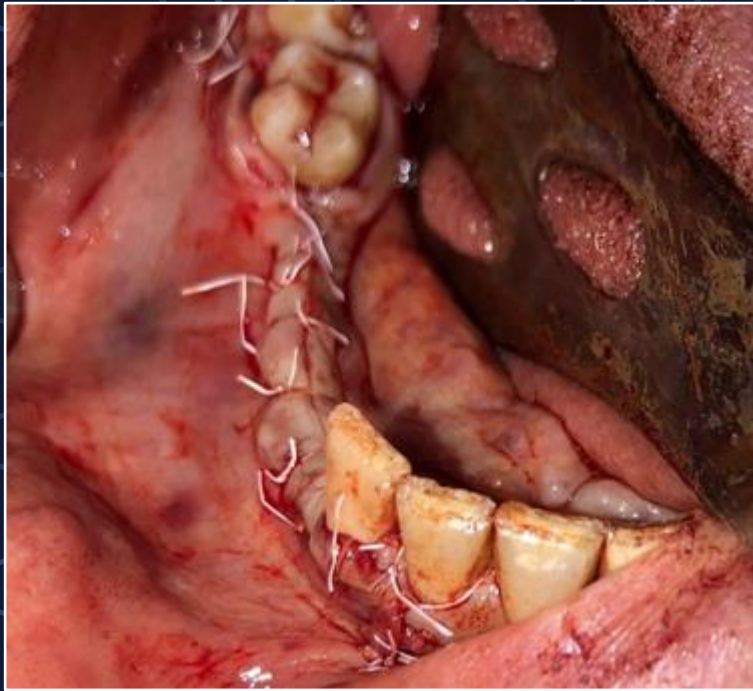
T. Zero



T. 10 days later



T. 14 days later



T. Zero

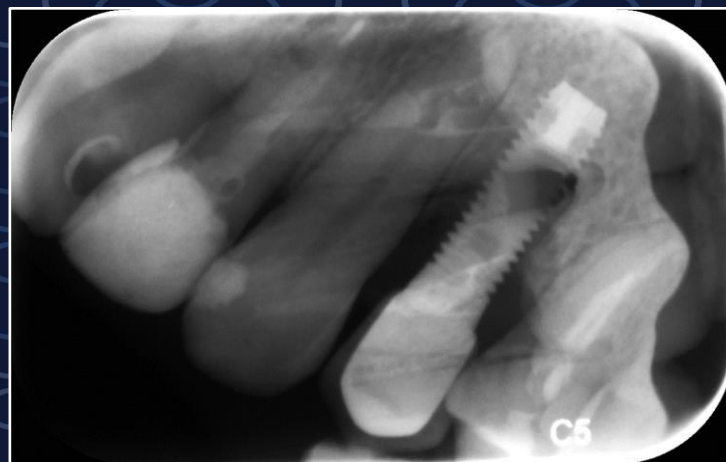
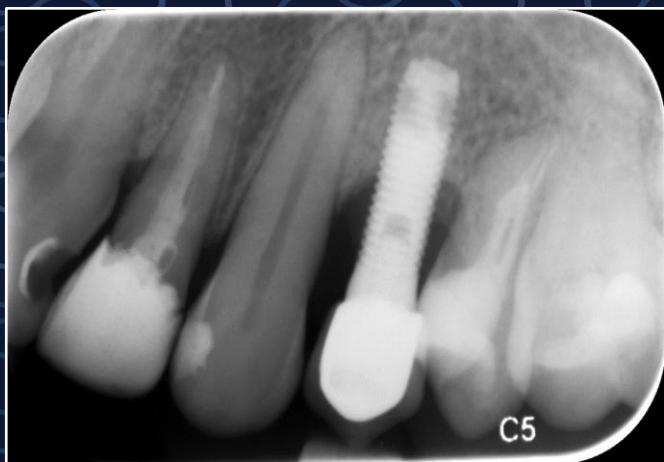


T. 48h later

Osteonecrosis: patient who uses biphosphonates



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Extraction with apical granuloma and maxillary sinus involvement.
Schneider's membrane is untouched.

Courtesy of *Dr. Emilio Porcar*



T. Zero – Post extraction



T. 10 days later



T. 30 days later - healing by
secondary intention

Eighty-year-old patient with Epithelioma on the back

N° 4 applications



Eighteen-year-old patient - Motorcycle accident



16 December 2020

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Stitches at the emergency
room



28 December 2020

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Eighteen-year-old patient - Motorcycle accident



16 December 2020



28 December 2020

Ozosan[®] gel

Wound following a compound fracture in a diabetic patient.
1 application in combination with fatty gauze (connective)



T. Zero



T. 1 week later

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SUMMING UP....

