

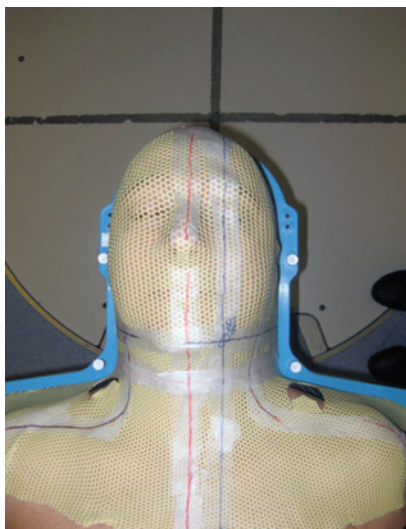
# Ozone: the ultimate disinfectant

By Joseph Allbeury

**L**ike many dentists, Leading Edge Dental principal Dr Brett Taylor had heard of ozone and its bactericidal properties but never actually experienced it first hand.

“I was aware of ozone and some of its applications in dentistry after I heard a lecture from Prof. Laurie Walsh,” Dr Taylor said. “A friend of mine, Dr Anne-Maree Cole in Brisbane, is also a massive fan of using ozone in dentistry but I had never pursued it for my own practice.”

Dr Taylor’s epiphany with the abilities of ozone as a treatment option came after he became ill.



“I discovered that I had a malignant tumour in my sub-mandibular gland and I subsequently underwent surgery to remove it,” he said “which was followed by six weeks of radiation therapy.

“When I started the radiotherapy, an unfortunate side effect is that you develop severe ulcerations in your mouth. It is hard to describe how bad this became - it was like having an ulcer on the entire side of



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your tongue for six weeks. Many patients who have this type of experience need to have a nasogastric tube inserted because they are not able to cope with eating enough to maintain their weight, which is critical for coping with the biological stress of treatment.

“When I told Anne-Maree about my situation, she immediately suggested using ozone to treat the ulcerations, and called

Tony Tomevski from Mint Devices in Sydney and asked him to lend me an Ozotop unit.”

The Ozotop is an intraoral delivery system that generates ozone in a benchtop unit and then delivers this into a handpiece so that the clinician can channel this to specific areas of the mouth for caries treatment, root canal disinfection, extraction

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socket disinfection, implant site disinfection and more.

“I admit I was sceptical to start with, but given the amount of pain and discomfort I was feeling, once Tony delivered the Ozotop I dutifully applied the ozone to the ulcerations.

“The effects of doing this were essentially miraculous. The pain from the ulcers was immediately relieved and over the course of the next few days, the benefits of the treatment multiplied. At one stage during treatment, I was getting ahead of the ulcerations and if I hadn’t spoken for 3 days at an event that interrupted the regime, I believe they would have disappeared completely. Thanks to the Ozotop, I was able to live a normal life and was only off solids for about 2 weeks during the radiotherapy. If you speak to anyone who has been through this, that result is pretty impressive.”

During radiotherapy, tissues break down making them susceptible to secondary infection. Ozone reduces the level

of microorganisms that cause secondary infection, allowing the ulcers to begin to heal. By oxidizing organic acids, ozone also raises the pH of the tissue to make it more comfortable.

“Using the Ozotop in this manner is not its intended primary purpose,” Dr Taylor said. “When inhaled at high concentrations, ozone can cause irritation and damage to the lungs. While there are no studies on head and neck cancer patients that validate what I experienced, there are studies about killing microorganisms and enhancing healing. From a personal perspective, my experience demonstrated the power of ozone as a treatment option, and I have now incorporated this into my dental practice.”

Dr Taylor subsequently purchased a Biotek Ozone H7110 system that ozonates water at point of use for his practice.

“We now use ozonated water daily in the practice,” he said. “We sterilise the water lines in our dental units every day, we use it as a patient mouth rinse for bac-

terial control, we use it as a rinse as part of our disinfection regime in endodontics and we use it as an irrigant when scaling subgingivally. Anywhere that bacteria or viruses can be a problem, ozone provides a solution.

“The major factor that counts against ozone is that ozonated water just looks like water. We associate disinfection with liquids that have colour and smell but ozone just looks like water, even though it is thousands of times more effective than, for example, sodium hypochlorite.

“With many products in dentistry, we’re essentially trusting the research that the product is doing the job it is meant to do. In this case however, I have experienced first hand exactly how effective it is.”

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*For more information on the Ozotop clinical ozone delivery system or the Biotek Ozone H7110 water treatment system, contact Mint Devices on (02) 8090-0994, call Tony Tomevski on 0417-775-252 or email [tonyt@mintdevices.com.au](mailto:tonyt@mintdevices.com.au)*