

DIABETES INFECTIOUS WOUND OXYGEN THERAPY

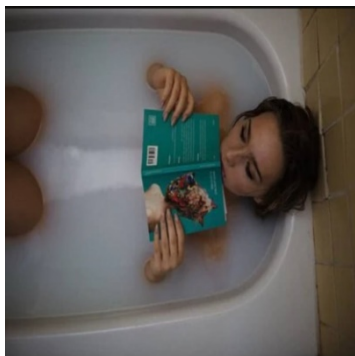
SOMA Oxygen Water, LLC (SOMA) has developed an innovative diabetes infectious wound therapy to enhance oxygen availability to the body. This therapy utilizes supersaturated oxygen micro-bubbles in a water media to deliver increased dissolved oxygen levels to the patient's bloodstream associated with the epidermis and dermis skin layers. The additional supersaturated oxygen water improves the healing of diabetic wounds and reduction in localized infectious disease.



DIABETES – A NATIONAL KILLER

More than 34 million people in the United States have diabetes of which approximately 1.1 million Pennsylvanians are diabetic. Diabetes is the 7th leading cause of death in the United States. In the last 20 years, the number of adults diagnosed with diabetes has more than doubled as the American population has aged and become more overweight or obese. Diabetes mellitus (DM) is a metabolic disorder characterized by hyperglycemia that leads to microvascular, macrovascular and neuropathic complications. Known as the silent epidemic, chronic wounds, or wounds that are slow to heal, currently are affecting millions of people around the world, representing a burden for healthcare systems. Other treatment areas include: COVID-19; respiratory infections, orthopedic surgeries and sport injuries. These major patient care problems need an innovative solution.

SUPERSATURATED OXYGEN WATER THERAPY



Oxygen is needed for cellular metabolism and optimal repair. Many diabetic patients are at risk for impaired perfusion and poor oxygen delivery and consequently poor healing or the onset of infection. When cellular oxygen demand outstrips supply, infection is more likely to occur. Lewis has significantly improved the beneficial properties of oxygen therapy through the skin by developing the SOMA Oxygen Water Process (SOWP) (patent pending). The Lewis oxygen water therapy facilitates oxygen delivery to the wound. Known as transcutaneous oxygen therapy, it is a non-invasive method of providing oxygen to the wound area to facilitate healing. The patient submerges their whole body or targeted wound area in the supersaturated oxygen bath at normal room like atmospheric conditions. The proprietary, process produces supersaturated oxygen (+500% - 50 mg/l) by pumping "pure" oxygen gas under novel process and mechanical parameters into a water stream. The richly saturated oxygen water mixture is then pumped into a soaking chamber (bath) or container to treat the desired area or the entire patient. The oxygen saturation levels are so concentrated that the patient's entire body is buoyed in the oxygen/ water bath.

SOWP BENEFITS

The SOWP was specifically developed to improve care for diabetic patients in a safe and cost effective manner. The process is superior to other technologies because it provides the following benefits: (1) supplies patients entire body through epidermis contact with 500% levels of oxygen in a safe and nonhazardous way as compared to hyperbaric chamber; (2) increases available oxygen to the bloodstream and key areas, such as the limbs and feet; (3) increase in oxygen uptake can be measured with pulse

oximeter; (4) increase in blood oxygen temporarily restores normal levels of blood gases and tissue functions to promote healing and fight infection; (5) delivers increased dissolved oxygen levels to blood vessels through the patient's epidermis and dermis skin layers.