Ozonotherapy is the use of medical grade ozone, a highly reactive form of pure oxygen, to create a curative response in the body. The body has the potential to renew and regenerate itself. When it becomes sick it is because this potential has been blocked. The reactive properties of ozone stimulate the body to remove many of these impediments thus allowing the body to do what it does best – heal itself.

Ozonotherapy has been and continues to be used in European clinics and hospitals for over fifty years. Ozone was in regular medical usage in the United States before 1885 as reported in the Florida Medical Association. Therefore, ozone predates the 1906 Pure Food and Drug Act and the FDA. Thus, ozone for medical usage is grandfathered in the United States and held perfectly legal for use without censure. With the advent of antibiotics, ozone therapy faded from routine use in the US. In the early 80’s, USA was re-introduced and has been increasingly used since. Recently, the International Scientific Committee on Ozonotherapy (ICO3) was formed to help establish standardized scientific principles for ozonotherapy. It has been found useful in various diseases:

- **Kills bacteria, fungi and viruses** at lower concentrations than chlorine (1 molecule of ozone = 3,000 to 10,000 molecules of chlorine) and kills 3500 times faster than chlorine. Also been shown to kill parasites.
- **Oxidizes toxins** including phenolics (poisonous compounds of methanol and benzene), pesticides, detergents, chemical manufacturing wastes and aromatic compounds more rapidly and effectively than chlorine without chlorine's harmful residues (trihalomethanes, etc.).
- **Immune system activation** while reducing inflammation.
- **Improves cellular oxygen utilization** through increasing oxygen delivery and reducing oxidative stress – conditions which address an underlying cause of cardiovascular and neurologic diseases, degeneration, aging, and cancer. As expected, systemic ozone significantly improves athletic performance.
- It causes the release of growth factors that **stimulate regeneration** of damaged joints and degenerative discs.
- Increases fibroblastic activity to help expedite repair.
- **Reduce or eliminate chronic pain** in many cases through its action on pain receptors.
- **Healing effects** have been demonstrated and published for interstitial cystitis, chronic hepatitis, inflammatory colitis, herpes, HPV, dental infections, diabetes, kidney glomerulonephritis, retinitis pigmentosa, macular degeneration, gangrene, toenail fungus, Parkinson’s, Alzheimer’s disease, and many more.

Oxygen as a single atom is deficient in electrons. This makes the atom very unstable, and as a result single oxygen atoms cannot exist in nature all by themselves – at least not for more than nanoseconds. However, two oxygen atoms can join together to share electrons, and this combination forms a very stable molecule referred to as O2. This is the stable form of oxygen that is found in the atmosphere.

When an energetic force, such as electricity or ultra-violet light, is imposed upon a molecule of O2, the two oxygen atoms are temporarily split apart into single oxygen atoms. Then, in a matter of nanoseconds these highly unstable oxygen atoms will pair up again and reform back into O2 molecules. But a small percentage of them will unite in a ménage-a-trois known as ozone. Thus, ozone, referred to as O3, is a molecule that consists of three oxygen atoms all sharing the same electrons. Because there just are not enough electrons to go around and keep three oxygen atoms completely happy, ozone is a relatively unstable molecule. This instability has powerful biological activity.

**How is medical grade ozone made?** Medical ozone is made by passing pure oxygen gas through a crystal tube through which an electrical spark is directed. The electrical energy breaks apart the oxygen molecules as described above, and what emerges from the other side is a mixture of pure oxygen and ozone.

Ozone can also be infused directly into the bloodstream or as Major Auto Hemotherapy, through ears (for sinus and upper respiratory tract conditions), insufflated into the GI tract (for colitis, liver conditions, and throughout the body), applied topically (as an oil), or injected into joints, trigger points, etc.

**Prolozone®** is a homeopathic/oxygen injection technique developed and pioneered by Dr. Frank Shallenberger. It is excellent for all forms of musculoskeletal and joint pain including chronic neck and back pain, rotator cuff injuries, degenerative and arthritic knees, degenerated discs, and shoulder and elbow pain. **Prolozone** seems to actually correct the pathology of the disorder, and according to Dr. Shallenberger there is a 75% chance for the chronic pain sufferer to becoming permanently pain free. Our experience with prolozone has had even better response rates because we combine other modalities described below with the prolozone procedure.

**What is Prolozone?** Prolozone is derived from the Latin word “proli” which means to regenerate or rebuild, and the word ozone. As mentioned earlier, ozone is a highly active form of oxygen that appears to powerfully promote...
the repair and regeneration of damaged tissues, joints, ligaments, and tendons. This usually initiates healing and a permanent end to pain. This seemingly provides a curative result assuming that any other contributing factors such as infection, misaligned gait and movement, nutrient deficits, etc. are successfully managed.

How Does Prolozone Work? The reason that some injuries completely heal and others don’t has to do with circulation and healing voltage/energy. In order for a damaged area of the body to regenerate and heal, it must have vitamins, minerals, and other co-factors needed for repair, oxygen, circulation, the healing voltage/energy, and often times the signal (the instructions) to heal. Prolozone supplies oxygen and healing voltage/energy.

Conditions That Can Be Treated With Prolozone: Prolozone works on just about any pain problem:

- Neck pain, whiplash, degenerated or herniated discs, low back pain, plantar fasciitis, carpal tunnel syndrome, torn tendons, TMJ syndrome, sciatica, heel spurs, neuromas, tennis elbow, rotator cuff tears, knee injuries, bone fractures, and virtually any other sports injury. Prolozone has also been helpful as an adjunct therapy for interstitial cystitis, pelvic floor dysfunction, and lymphatic congestion. Because prolozone treatments may also result in cartilage regeneration, it may be effective even for severe cases of osteoarthritis of the knee. Prolozone is not just for pain relief – it actually represents a permanent fix.

What to expect from a Prolozone procedure? Providing the biochemical components for repair with proper foods and nutrients is the first step. If that is not enough, consider prolozone to supply oxygen. Low levels of oxygen cause lactic acid accumulation, which is often what causes pain. Prolozone as done by Dr. Kaslow has three separate and synergistic procedures all done at a single 15-30” visit. Only one joint or joint area is done per visit.

1. Procaine (a common local anesthetic) combined with micro-dosages of anti-inflammatory remedies (such as Traumeel, Zeel, etc.) are injected into the injured area to temporarily stop pain, reduce inflammation and swelling, and improve circulation. In some cases, 1 drop of anti-inflammatory steroid is included in this initial injection. The joint is gently moved around to ensure maximum delivery. This alone may be markedly beneficial.

2. Next, the area is infiltrated with medical ozone/oxygen. Because ozone is a charged molecule, it also provides healing electrons (energy). The result is that the tissues get a strong signal to heal. As they heal, circulation is re-established and the restoration of function and structure follows as nature intended.

3. After the injections, a low level laser is applied to the area for about 7-10 minutes. The laser sends the tissue information and directions to repair and rejuvenate itself. This is a form of Photon Directed Action.

After the procedure is completed, you should go through gentle but the fullest range of motion you can without pain to observe improvements. Although some practitioners suggest icing the area, I do not recommend this as it impedes circulation. Avoid anti-inflammatories (Advil, Aleve, etc) and heavy stresses on the joint for 3-5 days but do keep the joint moving. At about 7 days, more strenuous activity can be initiated unless there has been a tear to a ligament or tendon in which case a longer period of light activity is needed to allow greater repair. A follow-up is generally not needed for the same joint for 2 weeks if the initial result is not satisfactory.

Is Prolozone the Same as Prolotherapy? No. Prolozone uses oxygen to create a healing. Prolotherapy uses inflammation to stimulate repair. Dr. Shallenberger used to use prolotherapy. Although he found that it was often effective, it had the following limitations. Prolotherapy is extremely painful. Pain usually persists for days to weeks after a treatment. Patients receiving prolozone feel immediate improvement with very little to any pain at all during the treatments. Prolotherapy requires many injections, whereas prolozone only requires a few. The response to treatment varies from person to person, but most people only need from 3-5 treatments. In our office 3-4 treatments is the norm but every case is unique. Thirdly, prolotherapy usually does not regenerate cartilage in damaged/degenerated joints whereas prolozone has been shown on x-rays to increase cartilage (even when the x-rays show “bone on bone”). Overall, prolozone is faster, less painful, more restorative, and much less expensive than traditional prolotherapy.

www.drkaslow.com