



MACULAR DEGENERATION AND HYPERBARIC OXYGEN THERAPY

The following represents a combination of studies compiled by Mark Westaway

Age-related macular degeneration (AMD) is the leading cause of vision loss for those 50 years and older. There are over 200,000 reported cases each year, a number higher than cases of glaucoma and cataracts combined. AMD can be considered “wet” (exudative) or “dry” (atrophic). About 85% of cases are “dry,” and the remaining 15% are “wet.”

AMD occurs when the macula, the retina’s central portion, is damaged. The macula is what is responsible for fine-tuning or focusing our central vision and allows us to see fine details. Typically, the first noticeable symptom is a blur or loss of vision to the central-most vision. Over time, as the disease progresses, the area of lost vision can expand towards the peripheral vision. The affected area can seem blurred or even become a blank spot in one’s vision. There are no mainstream treatments outside of vitamin therapy when treating dry AMD.

You may have been hearing about Hyperbaric Oxygen Therapy in the news recently. Numerous recent events have brought hyperbarics into the spotlight, but what is HBOT and why does it work? Hyperbaric Oxygen Therapy is the administration of 100% pure oxygen to the body at an increased atmospheric pressure. Our bodies are unable to absorb 100% oxygen at the surface atmospheric level due to the limited carrying capacity of the blood. However, plasma increases its ability to carry oxygen when under pressure. This function allows the blood to transport a considerably larger amount of oxygen to damaged cells and tissues. HBOT also decreases inflammation and swelling, promotes capillary growth, and increases the body’s stem cell production by 800%!

So how does HBOT help reverse symptoms of AMD? Damage to the macula means that there is less blood going to the area, which leads to reduced nourishment. By promoting capillary growth, there will be an increase in blood flow, which will restore proper nourishment to the damaged cells and tissues near the macula. Also, as HBOT increases stem cell production, new and healthy cells are constantly being made. Stem cells are undifferentiated cells, meaning they can essentially become any type of cell the body needs. Therefore, with numerous healthy cells being created, the stem cells can go throughout the body where any healing is needed and replace the damaged cells of the macula.