

NEW Treatment in Veterinary Medicine

HYPERBARIC OXYGEN THERAPY

By: Teresa Obr, DVM, Resident ACVIM (Internal Medicine)
CoAuthor: Colleen Willms, DVM, DACVECC, www.mygcvs.com

We are proud to introduce a new innovative treatment in veterinary medicine-Hyperbaric Oxygen Therapy (HBOT). This relatively old therapy has been making a return in both human and veterinary medicine. It is perhaps best known for treating scuba divers with decompression sickness, as well as victims of carbon monoxide poisoning. However, more uses are being discovered in the medical field each day.

Your veterinarian may recommend hyperbaric oxygen therapy as a part of your pet's treatment plan for a variety of diseases and illnesses. HBOT is an excellent adjunctive treatment for many conditions including bone infections (osteomyelitis), dental infections, skin infections, bite wounds (dog, snake and spider) and wounds with resistant bacteria. Many inflammatory and autoimmune conditions show a good response to hyperbaric oxygen therapy as well, such as vasculitis or arthritic diseases.

When a patient undergoes HBOT, they are first given a physical examination in order to be deemed stable enough to receive treatment without any intravenous fluids or medication administration. Once the chamber door is sealed, we begin to increase the pressure in the chamber over a time period of ten to fifteen minutes. We constantly monitor the patients to make sure they are as comfortable as possible, and make adjustments if need be. If a patient seems uncomfortable, we simply slow the progression of the treatment and allow



Amelia was our first patient to undergo hyperbaric oxygen therapy. She had thermal burns on most of her back. HBOT sped the healing process and made her surgical procedure much easier and more effective.

them time to adjust. Once the chamber is at the appropriate therapeutic pressure, the patient is treated for forty-five to sixty minutes, and then slowly decompressed again over ten to fifteen minutes. In its entirety, these safe and painless treatments usually last about an hour, in which the patients typically rest and relax while the pressurized oxygen is absorbed into his/her bloodstream.

Hyperbaric oxygen therapy works, at its most basic level by accelerating the healing process and increasing the concentration of oxygen within the patient's bloodstream. Instead of breathing normal room air, which is a mixture of gases, the patient breathes 100% pure oxygen.

For most conditions, multiple HBOT treatments are required to see the full benefit. As many as eight to fifteen treatments may be recommended depending on the

extent of the patient's illness and especially if a beneficial response has been seen. Hyperbaric oxygen is an excellent supplemental treatment for patients with difficult conditions, with few side effects. When proper precautions are taken, this is a safe treatment, with a multitude of beneficial results. Consult with your family veterinarian to see if hyperbaric oxygen therapy could benefit your companion.



Patients typically do well inside the chamber. Most of them relax and take a nap during their treatments.