



Here is a current case study performed at The Sanctuary, on one of the uses of hyperbaric oxygen therapy for breeding and reproductive problems. Hyperbaric Oxygen Therapy (HBOT) is a method of increasing the amount of oxygen being delivered to the tissues. This is accomplished by placing the horse in an enclosed chamber and increasing both the percent oxygen and pressure within the chamber. Increasing the atmospheric pressure in the chamber during a treatment increases the solubility of oxygen in the body, dramatically increasing the availability of oxygen to the tissues. This process allows oxygen to enter plasma and tissues more readily, repairing tissue damage and promoting the formation of new cells. HBOT also increases the efficacy of medications and reduces swelling and inflammation within the body.

CASE STUDY: Hyperbaric Oxygen Therapy and its uses in breeding “difficult mares”

The patient is a fourteen year-old Quarter Horse mare who has been barren for four years. Dr. Fred Benker, with Equine Medical Center of Ocala was called to do a reproduction exam on the mare and handle the breeding. Upon doing the first exam January 22, 2009 the mare presented with 4+ fluid in her uterus and her cervix was stenotic (tight). She cultured with klebsiella and a 4+ cytology. The mare was lavaged on January 23rd and 24th. From January 26th to the 30th, she was lavaged four additional times and infused with the antibiotic Timentin. Oxitocin was administered three times daily throughout the heat cycle. On the 28th, 29th and 30th of January, she was also treated in the hyperbaric chamber at a depth of 2.5 ATA for 45 minutes.

She was checked again on February 17th, with the ultrasound showing no fluid in her uterus. On February 20th a culture and cytology was performed. The culture showed no growth and the cytology was normal.

On February 24th an ultrasound showed a “CL” (corpus luteum) was present and prostin was administered to bring the mare back into heat. On March 2nd, a 39mm follicle was present and deslorelin, used to help promote ovulation, was administered. She was inseminated with cooled shipped semen on March 3rd. An ultrasound done on March 4th showed the mare had ovulated, and Dr. Benker lavaged and treated her with Timentin. The mare was pregnancy checked on March 18th and was pronounced “**IN FOAL**” 15 days. A recheck on March 31st **SHOWED A HEARTBEAT.**

Dr. Benker stated that “normally you don’t get such good results treating a klebsiella bacterial infection with just one series of treatments. Hyperbaric oxygen therapy, in conjunction with the veterinarian treatments and antibiotics, was instrumental in cleaning up this mare and allowing her to get pregnant”.

Special thanks to Dr. Fred Benker and Equine Medical Center of Ocala 352-873-7830 for allowing us to present this case study.

