

Hyperbaric Oxygen Therapy Improves Wound Care

The Wound Clinic at Lakeland Specialty Hospital, Berrien Center, has introduced hyperbaric oxygen therapy to its line of advanced treatment options for wound care.

Through the Sigma 34 Monoplace Hyperbaric System from Perry Baromedical, the patient receives pure oxygen in quantities 10-15 times greater than normal atmospheric levels while lying in a clear pressurized chamber 36" in diameter. The typical course of treatment requires 30 sessions, each 90 minutes in length with 15 minutes of decompression time. An additional 10 treatments are required for some patients.

Patient Selection

Patients who may benefit from hyperbaric oxygen therapy first undergo a comprehensive medical evaluation and testing under the direction of **Laurence Habenicht, MD**, medical director of the Wound Clinic and a surgeon specializing in wound care, to determine if the treatment is appropriate.

"The advantages of using hyperbaric oxygen therapy as part of wound care include the promotion of new blood vessels, decreased swelling and inflammation, a reduction of toxins and metabolic waste, a reduction in infection, and an improved rate of healing," said Dr. Habenicht.

Since the installation of hyperbaric oxygen therapy in January, the Lakeland Wound Clinic has gained experience in treating osteomyelitis, ulcers, radiation burns, and soft tissue radionecrosis with hyperbaric oxygen therapy. Other conditions can be treated as well (see sidebar).

Wound Clinic nurse **Linda Mills, RN**, reported that she has received many positive comments from patients about the chamber. "Lakeland installed the largest chamber available to ensure that patients would be comfortable and to reduce claustrophobia," she said. "A patient can communicate with the hyperbaric therapy technician, who monitors them during the entire treatment session, and the patient will often feel so at ease that they fall asleep."

Case Studies

A 61 year-old male, had a 9.45 centimeter radiation wound in his left knee for eight years, which had failed to heal with all previous treatment. After a course of hyperbaric oxygen therapy at Lakeland, the wound was reduced in size, successfully grafted, and closed.

In another case at the Lakeland Wound Clinic, a 60 year-old male was administered hyperbaric oxygen therapy for osteomyelitis in his left foot. The wound measured 0.58 centimeters before treatment. After receiving treatment sessions in the chamber, scheduled consecutively every Monday through Friday, the wound measured 0.09 centimeters.

"Whether your patient has an acute, complex, or high-risk wound, or has suffered for years with a non-healing wound, hyperbaric oxygen therapy offers a new hope for successful treatment," said Dr. Habenicht. "With the addition of hyperbaric oxygen therapy, Lakeland's Wound Clinic is at the forefront in comprehensive wound management."

For more information or to refer a patient, call the Wound Clinic at Lakeland Specialty Hospital at (269) 473-3363.



Conditions Treated with Hyperbaric Oxygen Therapy

Will it be covered?

Medicare and most other insurers cover hyperbaric oxygen therapy for the following conditions:

- Diabetic wounds
- Osteoradionecrosis (radiation tissue damage)
- Refractory osteomyelitis
- Compromised skin grafts and flaps
- Necrotizing soft tissue infections
- Thermal burns
- Crush injuries, compartment syndrome and other acute traumatic ischemias
- Clostridial myonecrosis (gas gangrene)
- Actinomycosis
- Air or gas embolism
- Carbon monoxide poisoning
- Smoke inhalation
- Decompression sickness
- Severe anemia
- Cyanide poisoning