Nearly 6 million individuals in America are affected by chronic, non-healing wounds. For these individuals, everyday activities can be a battle. Without proper treatment people may suffer for years without any improvement.

Diabetes, which affects more than 23 million people in the United States, is a leading cause of chronic, non-healing wounds. Every year more than 1 million people with diabetes will develop foot ulcers and 15 percent of people with diabetes will develop a foot ulcer in their lifetime. Such ulcers can lead to wound infections and progressive tissue loss, resulting in amputations, morbidity, and/or death.

Chief causes of a breakdown in the wound healing process include infection, tissue ischemia/hypoxia, inadequate local wound responsiveness and unrelieved pressure. Varieties of non-healing wounds include:

- Diabetic wounds
- Pressure ulcers
- Venous stasis ulcers
- Arterial ulcers
- Non-healing surgical wounds
- Complex soft tissue wounds
- Traumatic wounds
- Infected wounds

Treatment options include aggressive wound debridement, antibiotics, bioengineered tissue products (substitute skin products), skin grafting, substrates, nutritional support and hyperbaric oxygen therapy.

Hyperbaric oxygen therapy (HBOT) is an advanced treatment option that can be used in addition to other therapies. It is effective in decreasing major amputations in diabetic patients with severe neuropathic and/or ischemic foot ulcers.

HBOT allows a patient to breathe 100 percent oxygen 2-3 times greater than atmospheric pressure. The pressurized environment helps to reduce swelling and discomfort, while providing the body with at least 10 times its normal supply of oxygen. By forcing more oxygen into the tissue, HBOT encourages the formation of new blood vessels. As new blood vessels develop, red blood cells deliver more oxygen to the affected area, creating an optimal environment for the body’s natural healing processes to repair damaged tissue.

HBOT is administered on a daily basis in a special chamber. The patient can relax in the chamber and therapy is monitored by trained technicians working in collaboration with physicians.