

New Hyperbaric Wound Care Clinic Opens in Tennessee in response to High Incidence in Diabetes, obesity and Vascular Disease

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Hyperbaric clinic to open

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Hyperbaric oxygen therapy is not a new technology in the medical field — but it's about to take off in Bedford County.

The Advanced Wound Healing and Hyperbaric Medicine Center will open in July at Heritage Medical Center. The center will feature two state-of-the-art hyperbaric chambers, costing about \$350,000 each.

“Hyperbaric medicine has been around for a long time. The initial invention was created for dives, during which scuba divers would come up to the surface too fast, and get the bends,” said Dan Buckner, CEO of Heritage Medical Center.

However, hyperbaric oxygen therapy is now being used to treat wounds which, in order to heal, need a critical supply of oxygen.

“Hyperbaric oxygen therapy is a natural way for wounds to heal from the inside out. It forces the blood to flow,” said Kristi Lane, director of Advanced Wound Healing and Hyperbaric Medicine.

The hyperbaric chambers, which weigh a couple thousand pounds each, are set at a specific level of atmospheric pressure for the therapy. Level 1 is like being under 30 feet of water and level 2 compares to being under 60 feet of water. The chamber is filled with 100 percent oxygen, which supersaturates the patient's plasma, therefore increasing blood flow.

“For the most severe wounds, a patient would be in the hyperbaric chamber for a two-hour period of time, every day for four to six weeks,” Lane said.

“Wounds and scabs require a lot of oxygen for healing,” Buckner said. “During hyperbaric therapy, the plasma in your body carries enough oxygen so that you could survive without your red blood cells.”

The center's staff is well-equipped to serve patients, whether they need hyperbaric therapy or not.

“If a patient comes in to our facility for wound care, we can accurately predict the healing of the wound. We sit down with the patient and give them an assessment and a treatment plan,” Buckner said.

If the protocol doesn't do the job within the expected time period, the patient will most likely receive hyperbaric therapy.

“Between 10-15 percent of our patients are expected to receive hyperbaric therapy,” Lane said. “We have about 25 different techniques we use for hyperbaric patients.”

Tennessee is rated among the top five states with the highest diabetes, obesity and vascular disease rates.

“This is exactly why we’ve invested \$2 million in capital. We’re expecting the center to really take off,” Buckner said.

Diabetic wounds are the most common type of wound that is treated by hyperbaric therapy.

“There is a high incidence of a diabetic developing a non-healing wound,” said Dr. Frederic Seifer, medical director of hyperbarics at the clinic.

“Most diabetics’ wounds will heal without hyperbaric support, but 10-20 percent of diabetic wounds will not heal without hyperbaric support. When a diabetic develops a wound, the white blood cells and antibiotics in the body do not work if the body does not have a very high level of oxygen. With hyperbarics on board, white blood cells and antibiotics in the body receive oxygen, and therefore begin to work.”

The Advanced Wound Healing and Hyperbaric Medicine Center is working closely with home health and nursing homes to provide service to patients.

“We are as, or more, competitive than other non-healing wound centers in the country,” Buckner said.

The Advanced Wound Healing and Hyperbaric Medicine Center can be reached by calling the hospital switchboard and asking for Lane.

“We are not about transferring files, or taking patients away from their primary care physicians,” Lane said. “We will treat the patients’ wounds and then send them back to their regular physician. We want to support the primary care physicians of this community.”