



FOR MEDICAL PROFESSIONALS

The Hyperbaric Center: Comprehensive Wound Care



The Hyperbaric Center at PeaceHealth Sacred Heart Medical Center is one of three facilities in Oregon—and the only one in Lane County—accredited by the Undersea & Hyperbaric Medical Society. UHMS national accreditation demonstrates our achievement of the highest level of quality and safety for

patient care. Hyperbaric Safety Director Robert C. Barnes, MD, is the region's only board-certified physician in both Infectious Diseases and Undersea and Hyperbaric Medicine. And Belinda Hinkle, Certified Hyperbaric Registered Nurse, completes the team. Together, the Hyperbaric Center and the Wound & Ostomy Center at Sacred Heart provide comprehensive wound care.

CLINICAL BENEFITS OF HBO₂

Hyperoxygenation. HBO₂ increases oxygen in the plasma 10 to 15 fold, delivering more oxygen to damaged tissue to promote healing.

Hyperoxia-enhanced antimicrobial activity. HBO₂ can inhibit or inactivate certain toxins, enhance phagocytosis and white cell oxidative killing, and increase the activity of some antimicrobials.

Neovascularization. HBO₂ enhances fibroblast division, stem cell proliferation, and formation of collagen and capillary angiogenesis in late radiation damaged tissue, refractory osteomyelitis and chronic ulcers.

Hyperoxia-induced vasoconstriction. HBO₂ helps manage compartment syndrome and other acute ischemia in injured extremities. It also reduces interstitial edema in grafted tissue and decreases fluid resuscitation requirements in burn wound management.

Attenuation of reperfusion injury. HBO₂ has been shown to reduce the deleterious effect of leukocytes as blood flow is restored to damaged tissue.



Treatment Indications

- Acute carbon monoxide poisoning
- Decompression sickness
- Late radiation tissue injury
- Problem wounds and diabetic foot lesions
- Osteoradionecrosis
- Chronic osteomyelitis
- Crush injury, compartment syndrome, other acute ischemia
- Necrotizing soft tissue infections
- Clostridial myonecrosis
- Cerebral arterial gas embolism

Patient Benefits

- Patients rest comfortably in reclined position, reducing discomfort and anxiety.
- Patients watch television and movies or listen to music during treatment.
- Simple, non-invasive, painless procedure with minimal side effects.
- Improved quality of life.



HOW IT WORKS

The Hyperbaric Center houses Sechrist Monoplace 4100 Hyperbaric Chambers, the largest hyperbaric monoplace chamber on the market. The chamber capabilities include multiple intravenous transfusion lines, electrical monitoring including EKG, transcutaneous oxygen monitoring and a patient air-break breathing system.

HYPERBARIC CENTER STAFF



Kialing P. Perez, MD, Medical Director

- Board-certified, Infectious Diseases
- Advanced Training in Hyperbaric Oxygen Therapy
- Certified Diving Medical Officer of the Diving Medical Advisory Committee



Robert C. Barnes, MD, FACP, CWS, Hyperbaric Safety Director

- Board-certified, Infectious Diseases and Undersea and Hyperbaric Medicine
- Certified Wound Specialist of the American Board of Wound Management



Robert K. Pelz, MD, PhD

- Board-certified, Infectious Diseases
- Advanced Training in Hyperbaric Oxygen Therapy



Belinda Hinkle, RN

- Certified Hyperbaric Registered Nurse
- Wound Care Specialist

REFERRING A PATIENT

Hyperbaric oxygen therapy is a referral and consultation service only. An appointment will be made for the patient upon receipt of appropriate case documentation. The referring physician is responsible for the patient's general medical management and will receive regular updates from the hyperbaric team.

The Hyperbaric Center works in conjunction with *PeaceHealth Sacred Heart's Wound & Ostomy Center* which recently added the following services:

- Lymphedema wound management with a lymphedema-certified physical therapist
- Total contact casting for diabetic foot management

Other Wound & Ostomy services include:

- Evaluation of wounds and development of a plan of care
- Pre-and post-op ostomy evaluation and plan of care
- Pressure ulcer prevention and treatment
- Pressure ulcer prevalence and incident monitoring
- Specialty support surface management

The Hyperbaric Center

PeaceHealth Sacred Heart
Medical Center at RiverBend
3333 RiverBend Drive, First Floor
Springfield, OR 97477

☎ 541-222-4500

Fax: 541-222-1786

24/7 Emergency Availability

Via Patient Placement Center

☎ 541-222-3000

☎ 866-267-9680 toll free