METHOD
Under the supervision of HyOx’s physicians and certified hyperbaric technicians, patients breathe 100% oxygen pressurized up to three atmospheres in the hyperbaric chamber through hoods, facemasks or tracheostomy tubes.

WHEN A PATIENT BREATHE 100 PERCENT OXYGEN IN A PRESSURIZED CHAMBER, THE ELEVATED AIR PRESSURE LEADS TO A 10 TO 15 FOLD INCREASE IN TISSUE OXYGEN CONTENT.

THERAPY
Pressurized oxygen reaches the lungs, then enters the bloodstream and bones increasing plasma oxygen concentration and tissue oxygenation levels 10 to 15 times greater than normal.

SATURATION
Hyperoxic oxygen saturates the body promoting the growth of capillaries, enhancing white blood cell activity at the wound site, proliferating fibroblasts, and developing collagen and new tissue.

HEALING
Hyperoxic oxygen promotes new capillary growth and sufficient oxygen tensions to meet the metabolic needs and heal ischemic tissues.

Dissolves extra oxygen in the blood plasma
Breathing pure oxygen at three times normal pressure delivers 15 times more physically dissolved oxygen to tissues as breathing room air (Henry’s Law)

Promotes white blood cell bactericidal activity
With elevated blood oxygen levels, HBO₂ inhibits the growth of a number of anaerobic and aerobic organisms at the wound site working synergistically with antibiotics.

Increases oxygen concentration in hypoxic areas
HBO₂ increases diffusion of oxygen through the tissues enhancing oxygenation in areas with inadequate microcirculation.

Reduces edema by vasoconstriction
High pressure oxygen causes constriction of the blood vessels, decreasing intracranial pressure and edema in injured tissues while still increasing the total amount of oxygen to this area.

When a patient breathes 100 percent oxygen in a pressurized chamber, the elevated air pressure leads to a 10 to 15 fold increase in tissue oxygen content.