Hyperbaric Oxygen Therapy
For Chronic Refractory Osteomyelitis

What is Hyperbaric Oxygen?
Hyperbaric oxygen (HBOT) is a medical treatment in which the patient breathes pure oxygen under pressure. It is administered in a chamber and is the treatment for many medical and surgical conditions. It is usually part of an overall plan of care which may involve surgery, antibiotics or other therapy, but for certain conditions it may be the main treatment.

How does HBOT work?
During hyperbaric oxygen therapy, 100% oxygen is delivered in a closed chamber, and air pressure is increased to as much as 3 times normal. This causes a dramatic increase in oxygen taken in by the lungs which is then transferred to the blood. The blood then transports the oxygen to all parts of the body. The oxygen-rich blood helps improve healing and controls infection in certain conditions.

How does HBOT help my chronic refractory osteomyelitis (CROM)?
CROM is an infection in the bone that has persisted or returned despite receiving the appropriate treatment. With CROM, blood flow is decreased, which leads to low levels of oxygen at the infected bone site. The low levels of oxygen cause the specialized cells that heal bone to function poorly.

The combination of the infection and low levels of oxygen can lead to bone death.

Hyperbaric oxygen therapy has been proven to be beneficial with this condition by delivering more oxygen to the infected bone.

HBOT also assists with healing by:
- Supporting white blood cell removal of bacteria
- Facilitating new bone formation and removal of dead bone
- Enhancing antibiotic activity
- Stimulating new blood vessel growth
- Improving swelling (edema) by reducing inflammatory cell activity

What should I expect with HBOT for my CROM?
- The number of hyperbaric treatments is determined by the complexity of the bone infection. The number of treatments may range from 20 to 40 times, and are scheduled daily.
- You will continue regular wound follow up with your healthcare professional.
- If the bone infection does not improve after a course of HBOT, additional surgery may be needed to remove the infected bone and/or antibiotic therapy may be re-started.

With hyperbaric oxygen therapy, your blood delivers 10 to 15 times more oxygen and nutrients to your body, including your bones. More oxygen helps your bone infection heal.

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