

# Hyperbaric Oxygen Treatment: From Professional Athletes to Plastic Surgery

By Afsun Qureshi



June 15, 2000 -- Think that hockey players like to hang out in pubs after a tough game? Think again. Many professional athletes are lining up at hyperbaric chambers to help their sore, bruised and injured bodies recover. They use the chamber in between rounds in sports to heal their injuries, charge up their muscles and joints and increase their energy. And now, the trend is catching on with post plastic surgery patients, that is, for those patients that don't get claustrophobic at the thought of lying completely enclosed in a 7-foot long cigar shaped acrylic tube.

Proven to help wounds heal quicker by delivering oxygen at an accelerated rate, hyperbaric chamber centers are popping up in L.A. at a steady pace as doctors and patients alike discover the incredible healing properties that lie within. The chamber at McGill University is also known to accept a number of the Montreal Canadiens hockey team.

Hyperbaric oxygen tanks heal skin at perhaps almost double the usual rate and also fight infection. Because of this, it is now a sought after treatment favored by savvy cosmetic plastic surgery patients that are focussed on a quick and infection free recovery.

A hyperbaric chamber basically creates an atmosphere that is usually the double the pressure of normal sea level oxygen, as if you were 30-40 feet under water. But it's not water that's pushing down on you. It's air pressure. Once inside the chamber, oxygen is pumped into the lungs at three to six times the normal air pressure, and the oxygen works by sharply reducing the work load on the heart, eliminating carbon monoxide and other poisons.

Says Ken Albee, a technician at the Beverly Hills Center for Hyperbaric Medicine: "We used to get a lot of professional athletes who wanted to quicken the healing process of their bodies, but now we get a lot of plastic surgeons referring their patients."

"The exposure to the oxygen allows a lot of the tissues that are not receiving oxygen, either from poor circulation, infection, loss of blood supply from an incision or a burn from laser resurfacing - to get this vital oxygen."

The hyperbaric "supercharges" the body by compressing it to double the usual

pressure using pure oxygen, allowing and higher-than-normal amounts get into the bloodstream. This stimulates the healing process by allowing more oxygen to get delivered to the peripheral areas of the body, like the skin. Swelling decreases and new blood vessels are thought to grow faster.

"Scarring can be created from a long term healing process that was slowed down by edema (build up of fluids) or possible of infection," says Albee, "The goal of the chamber is to help the healing process which is slowed down dramatically by edema and any incidence of infection. What we want to do is provide an environment in these tissues that is ideal for healing. We are not, technically speaking, speeding up healing, but are normalizing healing by creating an environment where bacteria cannot thrive, therefore, reducing the incidences of infection."

Hyperbaric chambers, although relatively new to the cosmetic plastic surgery patients, have been around for twenty years. They have been recognized method of treating decompression sickness that deep-sea divers and pilots experience, carbon monoxide poisoning, burns, flesh eating disease, Lymes disease and also to quickly heal skin grafts, diabetic ulcers and more.

Hyperbaric chambers are now used to treating chronic fatigue victims. Says Albee: "Some of my patients get almost addicted to it because of the incredible healing values - they want to come back for more and more."

There are also some experimental treatments in the works. For example doctors are even using the treatment for stroke victims, by using the oxygen to go beyond the blockage of blood vessels in the brain, where much needed oxygen is needed, as well as to enhance the effectiveness of radiation treatment in cancer patients.

Albee works as a technician in the Beverly Hills office of Dr. Ralph Potkin, a hyperbaric physician trained in pulmonary diseases. Considered an innovator in applying principles of hyperbaric medicine therapy and treatment protocols to cosmetic surgery, Dr. Potkin's experience as a hyperbaric physician also includes being a patient.

As a sports scuba diver, Dr. Potkin himself has undergone the therapy. As a physician, he was using hyperbaric treatment for years before it became hip in the plastic surgery arena. "We have been treating smoke inhalation, diabetic ulcers, bone infections, flesh-eating bacteria, circulatory problems and more long before we were dealing with cosmetic plastic surgery patients."

"Now, people come to us for problems with healing associated with cosmetic surgery. They may have been smokers, they may have been overweight, they may have been immunity suppressed, their incisions may have got infected, etc. For these reasons, some patients have wound complications. We felt that since hyperbaric had a favorable effect on wounds that are not doing well, and it would work

well with patients who had burns, that we would apply that same physiology to patients undergoing cosmetic plastic surgery procedures."

"It is a relatively safe and natural way to alter the inflammatory process to help wound healing. It cuts down pain and swelling, inflammation in tissues, and it has an anti-bacterial effect. We have found that patients who had this therapy in conjunction with their cosmetic plastic surgery are all very happy, feel that they have an active role in their recovery, and seem to have a shorter recuperation period. And our preliminary data and large clinical experience suggest that scars heal better with this kind of therapy.

By hyperbaric treatments don't come cheap. The average session costs around the \$250 range, and usually, the physician can recommend 5-10 sessions. By the time it is done, the whole treatment can run about the same cost of the average cosmetic plastic surgery procedure. Part of the reason in the steep prices is because the state of the art equipment runs anywhere from \$100,000 to 200,000. Yet according to Albee, the amount charged is not relative to the costs incurred by the clinic: ~SWe are in the health care business - we are here to take care of people."



**Plastic  
Surgery**

**Many cosmetic surgeons are recommending the hyperbarics** to liposuction, liposuction, laser peels, fat transplant and hair transplant patients. Bruising goes away faster, swelling decreases faster, and the patients actually feel better overall. It's known to be exceedingly effective for laser peels. Normally it takes up to two weeks for new skin to completely grow back after a laser peel. With daily chamber treatments, this can be sometimes decreased to as little as 5 days. After a laser peel, lingering redness is a problem for many patients. The chamber gets rid of the red more quickly. For liposuction, the chamber helps the swelling decrease much more quickly, which results in less post-operative discomfort.

But all this goodness does have risks. Although the incidences of accidents are rare, the hyperbaric chambers are a 100% oxygen environment, and therefore pose an extreme danger of fire - leading to extreme Safety protocols. Says Albee: "We are very safety oriented - we go overboard on the safety protocols."

© 2001-2004 talksurgery