Barotrauma/Decompression Sickness Treatment

The most serious diving complications—air embolism and decompression sickness—will require recompression therapy. These hyperbaric chambers may be freestanding or associated with a local hospital. The chamber itself is typically made of thick metal plates with windows for observation. On the outside there are many pipes and valves. The chamber is usually large enough to accommodate more than one person. Medical personnel may come into the chamber with the patient or stay outside, watch through the window, and communicate by intercom, depending on the severity of the illness. While inside the chamber, one may experience loud noises or cold as the pressures change. Similar to diving, one will need to do Valsalva maneuvers to clear the ears while being pressurized. You will be closely monitored and be given specific instructions while you are in the chamber.

Other injuries can be managed at the hospital or doctor's office. All conditions will require avoidance of diving until improved.

- You may need to be transported to another location for hyperbaric treatments. This may include low-level flights in an aircraft to minimize further pressure changes.
- "Treatment tables" will determine the length of treatment and treatment steps. These tables take into account the depth, time of dive, decompression stops, and previous dives performed. The hyperbaric specialist will recommend which table to use.
- The hyperbaric chamber will increase the air pressure to make any gas bubbles inside your tissues smaller and to allow them to go away properly to avoid injury.

Pulmonary barotrauma may result in a collapsed lung (pneumothorax). If this occurs, the doctor must first determine how much of the lung has collapsed. If the collapse is relatively small you can be treated with supplemental oxygen and observation. Larger ones require that air be withdrawn from your body.
• Depending on the amount of air in the cavity, the doctor could use a needle or a hollow tube.
• The needle will withdraw small amounts of air, and then you will be observed for at least 6 hours.
• Larger collapses require a catheter, or chest tube, to be placed in the chest wall and remain for a few days until the lung that has been damaged can heal.
• Doctors must insert this tube through the skin into the chest cavity by doing a small surgical procedure. Local anesthetics reduce and generally eliminate any pain associated with this procedure.
• The tube is attached to a flutter valve or suction to promote air escape from the inappropriate space.

Self-Care at Home

There is no special treatment for face mask and suit squeezes resulting from pressure changes while ascending to the surface from a dive. They usually go away in a few days. Aerogastralgia or excess air in the stomach may occur with barotrauma. Symptoms usually clear up on their own and do not require attention unless your abdominal discomfort continues to worsen and does not go away in a few hours. You can treat pain from ear or sinus squeezes with over-the-counter pain relievers, such as acetaminophen (Tylenol), ibuprofen (Motrin, Advil), or naproxen (Aleve). You should visit your doctor to exclude possible serious ear injuries.

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