

Diving and flying

Each year, we look forward to our holidays and the flight to our dream dive destination. However, there are a few things to consider with respect to diving and flying.

Outbound flight

In case of a bigger time difference between the home zone and the dive destination, the 'de-synchroni-zation' of the biological rhythm as well as the jet lag can cause tiredness, lassitude and the feeling of exhaustion thus triggering a lack of concentration and/ or reduced ability to respond while diving. Especially on flights outbound eastward, the 're-synchronization' can take a couple of days. At least one good night's sleep should precede the first dive. Be aware of a sufficient fluid intake during the flight as dehydration due to the dry air in the aircraft cabin increases the risk of decompression sickness and nitrogen narcosis.

Return flight

Considering that all divers do have 'silent bubbles' in their body after diving, it takes at least 24 hours to re-establish the balance of dissolved inert gases (nitrogen) and the ambient pressure and to completely desaturate. After repetitive dives over a longer period of time (e.g. during liveaboard diving trips), it might take up to three days until the 'slower body tissues' (e.g. cartilage, tendons, ligaments etc.) are completely free of residual nitrogen.

Depending on the type of aircraft, the cabin pressure is reduced to 0.7–0.8 bar, thus increasing the wash out of the residual nitrogen – similar to the physical preconditions in high altitude diving. Pre-existing mild symptoms which were not obviously linked to symptoms of a decompression issue might get aggravated during the flight (bends, pain in joint, itchiness of skin). Vibrations in smaller aircrafts or helicopters are also disadvantageous. Just imagine shaking a bottle of champagne before uncorking it! Another unfavourable issue is the smaller partial pressure of oxygen in the aircraft cabin. Whereas this does not pose a problem for a healthy person, it can become a problem for a person with a pre-existing heart condition or a still saturated diver. The air inside the plane is always dry with a decreased air humidity thus aggravating dehydration and consequently decompression sickness symptoms.

General recommendations

The longer the interval between diving and flying, the better! aqua med recommends as a basic directive a 24 hours interval after the last dive. If you had decompression dives, exceeding repetitive dives or omitted deco stops, the interval should be prolonged to 48 hours. After a dive accident or treatment in a recompression chamber, follow the instructions of your treating dive doctor and wait a minimum of 24 hours after the symptoms have ceased before boarding a plane. Aerial transportation or repatriation to reach a treating deco chamber after a severe dive accident should be undertaken with 100% norm baric oxygen either in a Learjet (cabin pressure 1 bar) or in a helicopter not exceeding an altitude of 300 metres above sea level.

