

Release the pressure

Avoiding ear and sinus injuries

Quick tips to make equalising easier



Listen for the "pop"

Equalise before you enter the water. This means the Eustachian tubes are open.



Descend feet first

Descend slowly and if needed extend your neck as this tends to open the Eustachian tubes.



Start early

Equalise early and often (every 0.3-0.5 m, especially at the beginning of the dive).



Stay ahead

If you cannot equalise or experience pain and discomfort during descent, then ascend slightly until the discomfort is relieved.



Avoid

Diving with a cold or whilst congested. Diving with not-vented earplugs or a hood that is too tight as it does not allow water/air to enter the external ear.



Stop if it hurts

If you cannot equalise or experience pain and discomfort during descent, then ascend slightly until the discomfort is relieved.

Equalising techniques

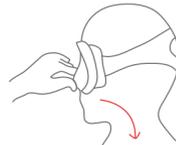
Valsalva:



Hold nose and breathe against a closed throat

Toynbee:

Swallow with mouth and nose closed (good for ascent)



Frenzel:



Valsalva while contracting throat muscles with a closed throat

Lowry:

Valsalva plus Toynbee – holding nose, gently trying to blow air out of the nose while swallowing



Edmonds:



Jutting jaw forward plus Valsalva / Frenzel

Miscellaneous:

Swallowing, wiggling jaws (good for ascent)



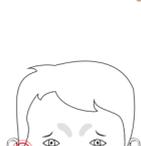
Causes

- Changes in ambient pressure
- Recent cold or congestion
- History of ear infections
- History of a deviated septum or a broken nose
- Allergies

ACHOO

A diver with a medical history may require referral to an ENT physician or allergy specialist.

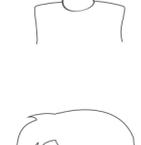
Symptoms of barotraumas of the ears and sinuses



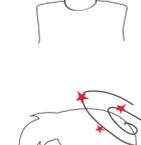
Mild to severe pain in the sinuses or ear



Ringing or roaring in the ear



Muffled hearing, partial or complete hearing loss



Nausea, vomiting and dizziness



Blood coming from the nose or present in sputum.



Pain felt above the eye, cheek bone or at the upper teeth

Treatment and medication



If you experience any symptoms during or after a dive, consult a physician (preferably an ENT specialist) to determine the extent of any injury. There may be some treatable condition causing the problem.

0860 242 242 (SA)

+27 11 266 4900 (int)



0861 FAX DAN (329 326)



info@dansa.org



www.dansa.org