

Monthly Safety Notice

MAY 2019

National Baromedical Services, Inc.

Earplugs for the Hyperbaric Patient; Good or Bad idea?

Background

Occasionally this topic comes up as a possible routine use to prevent ear equalization difficulties, or as an option for patients known to have difficulty with ear clearing.

The Issue

We do not generally recommend the use of earplugs to prevent ear barotrauma. Patient education, possible use of decongestants and an attentive hyperbaric chamber operator invariably prove effective.

A product on the market called *EarPlanes* by Cirrus Healthcare is one such earplug. The manufacturer claims that its use during air travel will alleviate ear discomfort during rapid changes in cabin pressure associated with take-offs and landings. It does so by slowing the rate of air pressure change across a ceramic inner filter built into the device.

Bottom Line

We do not recommend their use. If however, earplugs are used, they must be those with the above referenced filter, e.g. *EarPlanes* or *FlightMate*. These devices allow a slower rate of pressure change within the external ear canal, thereby providing more time for the middle ear to equalize. However, if there is a Eustachian tube occlusion these tubes will not work. Another problem is that the filters typically become clogged with cerumen so cease to function effectively, such that the patient may need a new pair for each treatment. Traditional occlusive earplugs are dangerous and contraindicated.