

# Ophthalmological Conditions

The few conditions relevant to the eye and airline travel relate to the dry condition of the cabin atmosphere and potential problems in postoperative eye care in which there may be air left inside the eye, as in some forms of retinal detachment surgery. Contact lens wearers often find the dry cabin air difficult, as there may be insufficient tears to keep the lenses lubricated. Eye conditions that are inherently dry, such as keratoconjunctivitis sicca, should not preclude air travel, because supplementary tears can be used. The patient who has just had cataract surgery and a lens implant with sutureless surgery should avoid rubbing the eye if the air becomes dry, as wound leakage might result.

Ophthalmological procedures for retinal detachment involve the intraocular injection of gas to temporarily increase intraocular pressure (1). Until this intraocular bubble decreases to less than 30% of the volume of the vitreous, flight is contraindicated. This is approximately 2 weeks if sulfur hexafluoride is used and 6 weeks if perfluoropropane is used.

Minimizing the risk of trauma to the eye by minimizing movement in the cabin and keeping the seat belt fastened at all times when seated is advisable after any ophthalmological surgical procedure. The passenger who becomes easily airsick should not travel immediately after intraocular eye surgery, since the straining associated with retching and vomiting might rupture a wound.

Passengers needing eye drops for ocular conditions such as glaucoma should schedule their drops as usual. Any passengers with conjunctivitis should be in the noninfectious stage of recovery before flying, but should continue their antibiotic drops as directed.

Passengers with severely limited vision may need special assistance boarding and deplaning, and should be seated close to, but not at an emergency exit. Traveling with a companion or attendant should be considered.

Patients with glaucoma can travel safely as long as they take their medication as directed and are under reasonable control. In an unpublished study, it was found that the intraocular pressure of normal subjects increased very little with high altitude exposure.

## REFERENCE:

1. Polk JD, Rugaber C, Kohn G, et al. Central artery retinal occlusion by proxy: a cause for sudden blindness in an airline pilot. *Aviat Space Environ Med* 2002; 73:385-7.