## Stuart Selkin, MD, JD, FACS

(Route 110) Melville, NY 11747



(631) 692-7362 Fax (631) 692-7546 www.drstuartselkin.com

## Tips for Preventing and Treating Ear Problems When We Fly

Lots of us have gotten off an airplane with cloggy ears. Barotitis is an ear problem caused by altitude. It's a sudden, severe (acute), or a slowly developing, less severe (chronic) inflammation of the middle ear from pressure differences between air in the middle ear and air in the atmosphere.

We may perceive the pressure as fullness in our ears, and we can usually relieve it by swallowing. If there's enough of a pressure differential, as may happen as the plane comes down, we must force the valves, called Eustachian tubes, to open. We do this with the Valsalva maneuver, which is holding our nostrils shut and blowing air forcibly into our nose. Little kids can blow up balloons. Opening the tubes equalizes pressure; but if our tubes are inflamed, even forceful attempts to open them will fail. Common causes of inflammation are respiratory infection, nasal allergy, and smoking.

Symptoms of barotitis include ear pressure, pain, fullness, ringing, and hearing loss. Vertigo, or a sensation of movement, is rare, but for skydivers, scuba divers, or pilots may be catastrophic. Perforation, or rupture of the eardrum, allows pressure to equalize, and actually relieves symptoms.

Preventing barotitis is more important than treating it. We must equalize pressure by opening our Eustachian tubes. Upper respiratory infections swell the Eustachian tubes, so we must avoid flying with a cold. Nasal sprays can prevent and cure barotitis, especially if we have allergies. Nonprescription sprays such as Afrin are extremely effective for prevention and treatment. But most may cause a true addiction to their use, erosion of nasal membranes, blood pressure elevations, and heart palpations. We must never use these sprays for longer than four or five days. Antihistamines taken by mouth may effectively prevent and treat barotitis, especially in allergy sufferers, but may make us drowsy or interfere with urination in older men. Decongestants, either with or without antihistamines, are also very effective for preventing and treating barotitis, but may cause jitters, insomnia, heart palpitations, and blood pressure elevations. Dr. Selkin's favorite means of preventing barotitis relies on steroid nasal sprays. Although they require a prescription, they may be used safely for many years. They don't cause addiction to their use, elevated blood pressure, heart palpations, drowsiness, or urinary problems. But they can dry out nasal membranes and cause bleeding, or, in some folks, headaches. Treating barotitis sometimes requires an antibiotic or steroids (cortisone) by mouth. Most perforations caused by barotitis will heal spontaneously, and only a few require surgery. If a perforation has occurred, keep the ear dry; but not with plain cotton. Instead use siliconized ear plugs, lamb's wool, or vaseline-impregnated cotton. Finally, on rare occasions, draining the middle ear, or other types of repair must be done surgically.

So, enjoy air travel, skydiving, and scuba diving. Just remember: As the plane descends, chew gum, swallow, and do the Valsalva maneuver. It's ok to squirt some afrin into each nostril before takeoff and again before landing. Just be careful if you've got high blood pressure. If you're traveling with little ones, let them chew gum, or drink from a bottle, or with a straw. To keep them swallowing, make sure that babies are awake and upright. It's ok to use whatever pediatric nasal spray your pediatrician may suggest—before takeoff and again before landing. Same advice applies to skydivers and to scuba divers. Finally, don't fly, skydive, or scuba dive with an upper respiratory problem. And if you develop or want to prevent a problem from barotitis, call Dr. Selkin.