

# Earache - From Air Travel

## Definition

- Ear pain that starts during air travel
- Medical name is barotitis media or barotrauma

## Health Information

### Symptoms

- Ear pain on one or both sides
- Sudden onset when going from higher altitude to lower altitude
- Mild cases may just cause a feeling of fullness and congestion
- Rarely can have severe pain. Usually means the eardrum stretched so much that it caused some bleeding.
- No fever

### Cause

- When the eardrum is stretched, it hurts. With air travel the eardrum can get pushed inward.
- Why does it hurt? First, the ear tube that connects the upper throat to the ear gets blocked. Then air can't get into the middle ear space to equalize the air pressure. The outside air pressure increases during descent. It pushes the eardrum inward. This causes pain.
- More risk if already congested with a cold or nasal allergies.
- Mountain driving can cause similar symptoms.
- Has nothing to do with an ear infection. Ear infections cause the eardrum to bulge outward.

### Prevention of Earaches During Air or Mountain Travel

- Most symptoms happen when the airplane is coming down in altitude (landing). This is called descent. Cabin pressure increases during the 15 minutes before landing. To be sure, also protect your child during take-off,
- Keep your child awake during both takeoff and descent. Also, follow the tips below:
- Swallow fluids or saliva. Babies can use a pacifier.
- Children over age 6 can chew gum.
- Yawning also can open the middle ear.
- Some people need to use a decongestant nose spray before take-off.

## Care Advice

### 1. Overview:

- Getting ear congestion during descent is quite common.
- Getting an earache is less common.
- Both are from a blocked ear tube (eustachian tube). This tube normally keeps the ear pressure the same as outside air pressure.
- Here is some care advice that should help.

### 2. Pain Medicine:

- To help with the pain, give acetaminophen (such as Tylenol) or ibuprofen. Use as needed.

### 3. **Techniques to Open the Ear Tube:**

- Try to open up the ear tube. (Also known as popping the ears.)
- **Yawning technique.** That means repeated jaw stretching yawning.
- **Low pressure technique.** Swallow a fluid while the nose is pinched closed. Reason: Makes a vacuum in the nose that helps the ear tube open up.
- **High pressure technique.** Take a deep breath. Pinch your nose and close your mouth. Then pretend you are blowing your nose. As the pressure builds up in your mouth and nose, the ears may open.

### 4. **Decongestant Nose Spray (Age 12 years or older):**

- If not better after 1 or 2 hours, use a long-acting decongestant nose spray. Reason: It shrinks the lining of the nose. It also helps to open the ear tube.
- You can ask your pharmacist to suggest a brand.
- Dose: 1 spray per side, 2 times per day as needed.
- Don't use for more than 3 days. Reason: Can cause rebound swelling in the nose.
- Decongestants given by mouth (such as Sudafed) are not advised. They may lessen nose and ear congestion in some children. However, they also can have side effects.

### 5. **Allergy Medicines:**

- Nose allergies can cause ear stuffiness.
- If your child has hay fever or other allergies, give an allergy medicine. An example is Benadryl.

### 6. **What to Expect:**

- The symptoms most often clear within 12 hours.
- If the pain lasts longer, it may be from an unrelated ear infection.

## Call Your Doctor If

- Ear pain lasts more than 24 hours
- Ear congestion lasts more than 3 days
- You think your child needs to be seen
- Your child becomes worse

### **Pediatric Care Advice**

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