

## Flying and your ears

If you have ever been on a plane journey, you'll know that by the time the pilot announces that the plane has begun its descent to your destination, your ears will have already given you this message. They start to feel a bit odd, either feeling blocked or painful. It's all due to pressure changes. As the plane starts to lose height, the pressure in the air around you changes. Until the pressure inside the tubes behind your eardrum adapts, the pressure inside and outside your ear is different. This pushes the eardrum in, stretching it and giving you pain.

The pressure change is happening to everyone, but in some people the pain or blockage is worse than others. In particular, if you are congested (because of a cold or hay fever, for example), it is harder for your ears to adapt. If this is the case, you may be more aware of pain or blocked ears than the person sitting next to you.

### **Why are some people affected more than others?**

The Eustachian tube is normally closed but opens from time to time when we swallow, yawn or chew. In most people, just normal swallowing and chewing quickly cause air to travel up the Eustachian tube to equalise the pressure. Some airlines offer sweets to suck and eat when the plane is descending, to encourage you to chew and swallow. However, the Eustachian tube in some people does not open as easily and so the pressure may not be equalised so quickly. For example, some people may have a more narrow Eustachian tube than normal. Also, if you have any condition that causes a blockage to the Eustachian tube then the air cannot travel up to the middle ear. The common cause of a blocked Eustachian tube is from mucus and inflammation that occur with colds, throat infections, hay fever, etc. Any condition causing extra mucus in the back of the nose can cause this problem.

### **How can I prevent ear pain when I fly?**

Ideally, anyone with an ear infection, cold or respiratory infection, etc, should not fly. The following may help people who develop ear pain when flying.

- **Food or Fluids:** When the plane begins to descend swallow, yawn or chew. For babies, it is a good idea to feed them or give them a drink or dummy at the time of descent to encourage them to swallow.
- **Try doing the following:** Take a breath in. Try to breathe out gently with your mouth closed and whilst pinching your nose (the Valsalva manoeuvre). In this way, no air is blown out but you are gently pushing air into the Eustachian tube. If you do this you may feel your ears go 'pop' as air is pushed into the middle ear. This often cures the problem. Repeat this every few minutes until landing - whenever you feel any discomfort in the ear.
- **Do not sleep when the plane is descending to land:** If you are awake you can make sure that you suck and swallow to encourage air to get into the middle ear.

The above usually works for most people. However, if you are particularly prone to develop aeroplane ear, you may wish also to consider the following in addition to the tips above:

- Antihistamine tablets (available at pharmacies): Take the recommended dose the day before and the day of travel. This may help to limit the amount of mucus that you make.
- A decongestant nasal spray can dry up the mucus in the nose. Spray the nose about one hour before the expected time of descent. Spray again five minutes later. Then spray every 20 minutes until landing. These are only for use for a short time.
- Decongestant tablets or syrup. Take the dose recommended half an hour before take-off, and if necessary repeat according to the instructions.
- Air pressure-regulating ear plugs. These are cheap, reusable ear plugs that are often sold at airports and in many pharmacies. These ear plugs slow the rate of air pressure change on the eardrum. Follow the instructions that come with them.