

Eustachian Tube Function

A healthy middle ear has the same air pressure outside the eardrum as it does behind the eardrum. Normally, this allows the eardrum to vibrate freely so you can hear properly. Air enters the middle ear through the narrow eustachian tube that connects the back of the nose to the ear. You have experienced your Eustachian tube opening when you yawn or swallow and hear a pop: your eustachian tube has just opened, equalizing the air pressure.

Blockage of the eustachian tube during a cold, allergy, or upper respiratory infection leads to the accumulation of fluid behind the eardrum. The fluid then becomes infected and the buildup of pressurized pus in the middle ear causes earache. This is the infection called acute otitis media. Since the eardrum cannot vibrate properly, hearing problems may occur.