



FIGURE 14-2: Anatomy of the ear.

as a pressure relief valve, bulging outward as pressure rises. The inner ear consists of fluid-filled tubes containing the actual hearing cells of the body. The front portion contains the following: the cochlea, which helps with hearing; the semicircular cells, which help maintain balance; and the vestibule, which also is responsible for balance. Thus, hearing and equilibrium are very closely intertwined in the anatomy of the ear.

■ EAR MEDICATIONS

Otic, or ear, medications can be used to treat inflammation, wax buildup, or infections. The most common disorders requiring ear medications are infections (Fast Tip 14.1). Other common conditions requiring medication are impaction of cerumen and motion sickness. See the Master the Essentials table for descriptions of the most common medications for disorders of the ear.

Medications for Ear Infections and Pain

Several types of medication are used to treat infections depending on their location. Swimmer's ear (otitis externa) is an infection of the outer ear, and otitis media is a middle ear infection. Antibiotics

Fast Tip 14.1

Otic medications are usually deposited in the outer ear, or pinna, from where they flow through the auditory canal toward the eardrum. If the eardrum is intact, it provides a barrier that prevents infection from entering the inner ear. Otic medications are sterile so that if the eardrum is ruptured they will not transmit bacteria beyond the eardrum; however certain medications may be harmful, such as those used to loosen cerumen as they contain caustic ingredients. If you or the patient suspect a rupture, discuss this with the physician before instilling any otic medication.