

membrane unless the canal is straightened. In infants, the canal curves upward. Therefore, pull the pinna down and back to the 6 to 9 o'clock range to straighten the canal (Fig. 4-24, A). With older children, usually those older than 3 years old, the canal curves downward and forward. Therefore, pull the pinna up and back toward a 10 o'clock position (see Fig. 4-24, B). If you have difficulty visualizing the membrane, try repositioning the head, introducing the speculum at a different angle, and pulling the pinna in a slightly different direction. Do not insert the speculum past the cartilaginous (outermost) portion of the canal, usually a distance of 0.60 to 1.25 cm (0.23 to 0.5 inch) in older children. Insertion of the speculum into the posterior or bony portion of the canal causes pain.

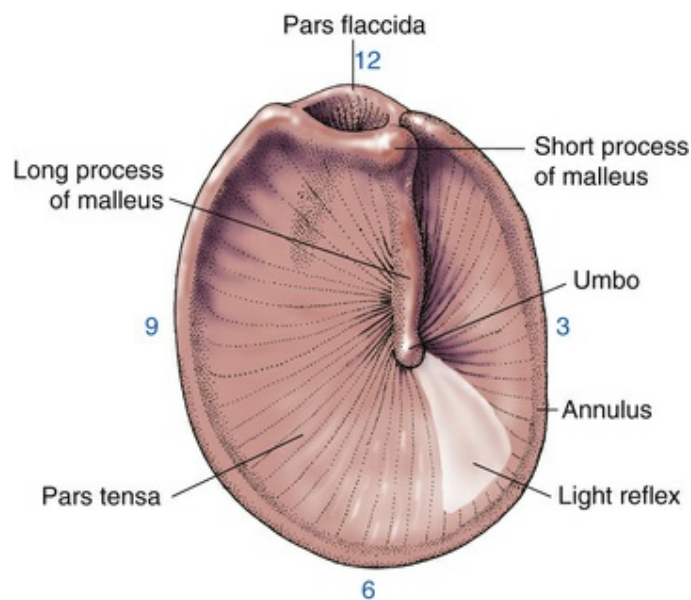


FIG 4-23 Landmarks of the tympanic membrane. (From Ignatavicius DD, Workman ML: *Medical-surgical nursing: patient-centered collaborative care*, ed 7, St Louis, 2013, Saunders.)