IMAGE BANK

QUICK REFERENCE *for* OTOLARYNGOLOGY

Guide for APRNs, PAs, and Other Health Care Practitioners

Kim Scott

Consultants

Richard F. Debo

Alan S. Keyes

David W. Leonard

SPRINGER PUBLISHING COMPANY

Physical Examination Documentation of Normal and Abnormal Findings From the Ear, Nose, and Throat Examination

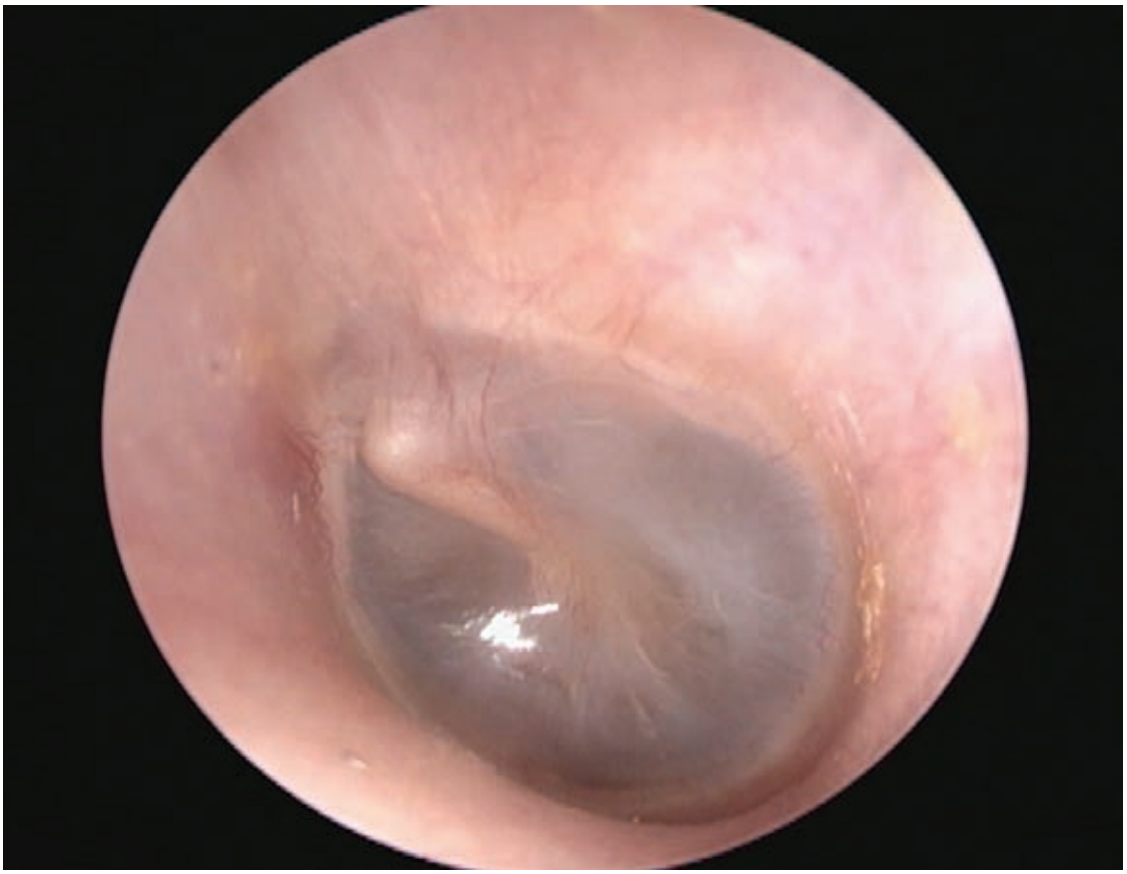


FIGURE 1.1 Normal tympanic membrane.

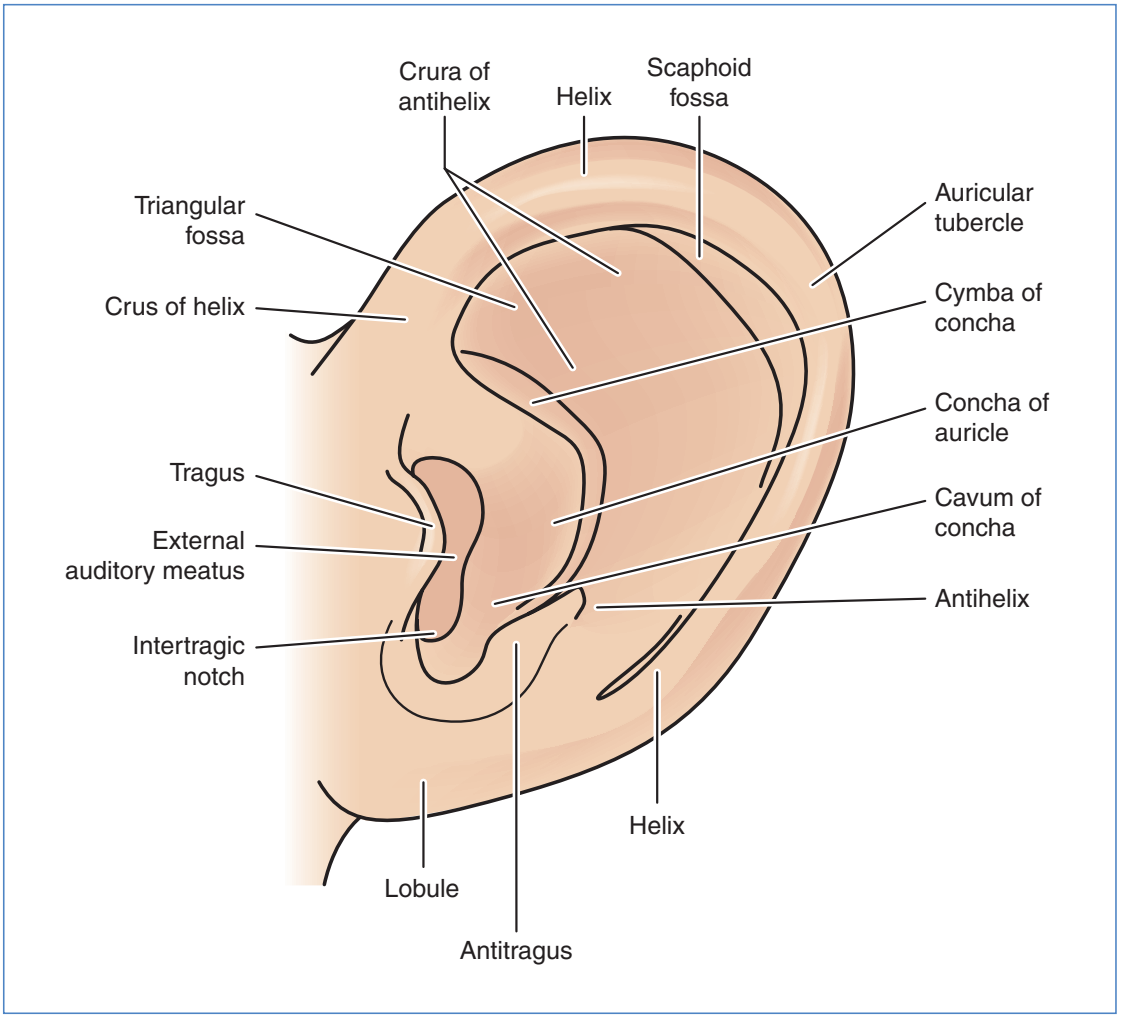


FIGURE 1.2 Pinna.

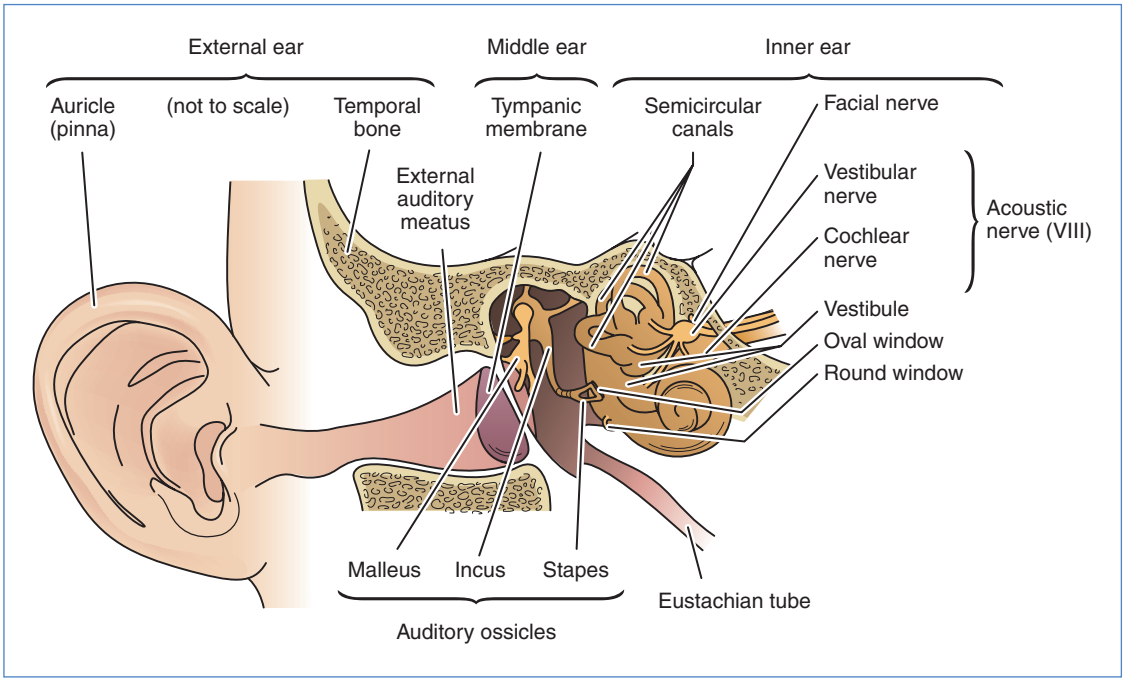


FIGURE 1.3 External, middle, and inner ear.

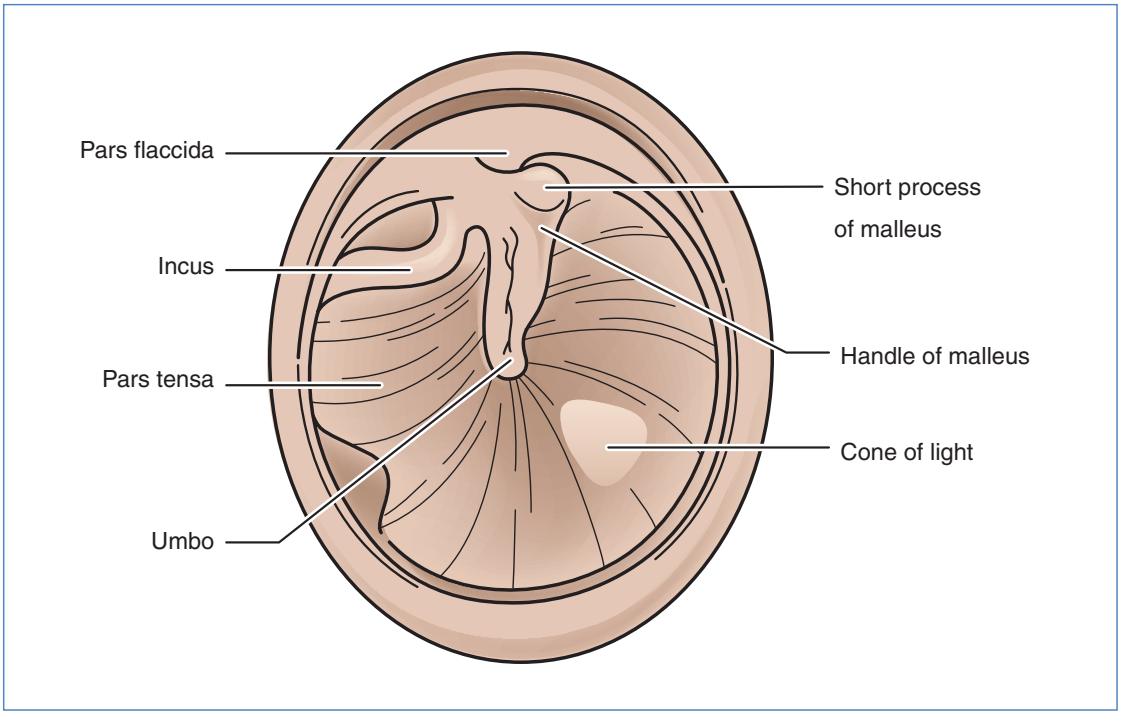


FIGURE 1.4 Tympanic membrane.

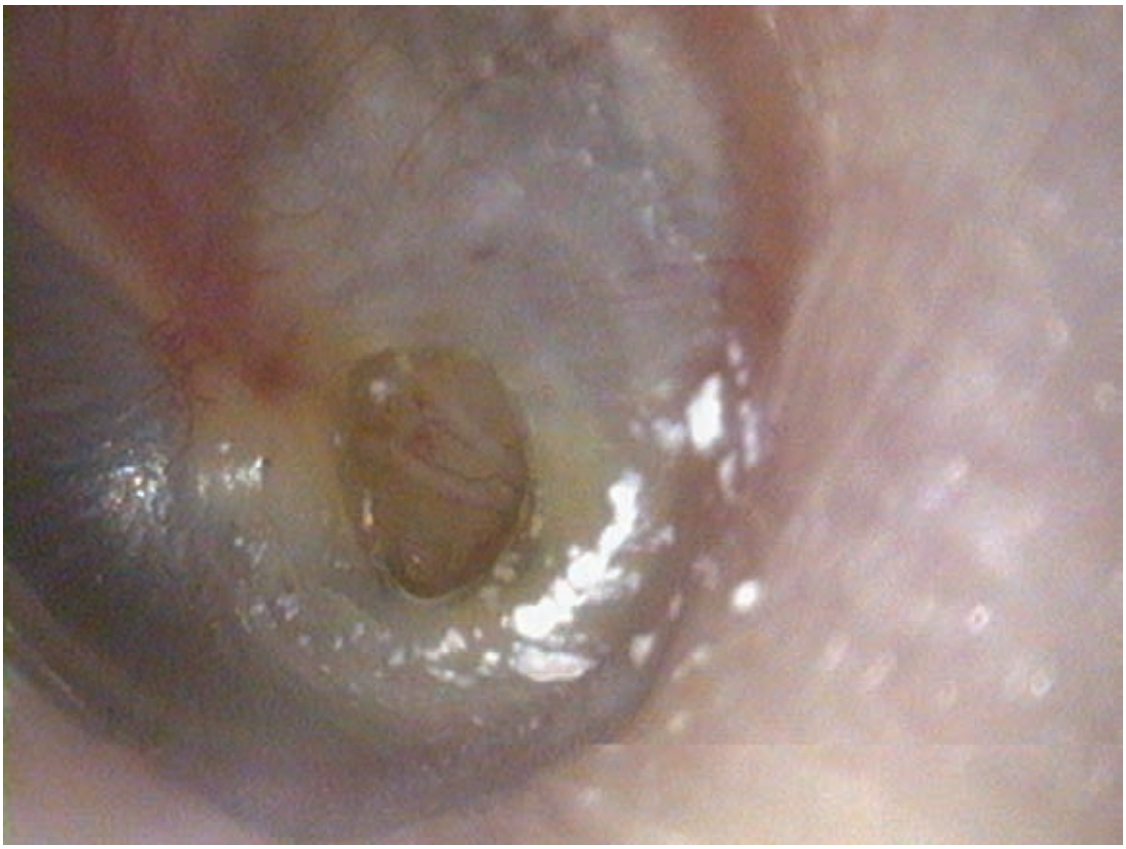


FIGURE 1.5 Central tympanic membrane perforation.

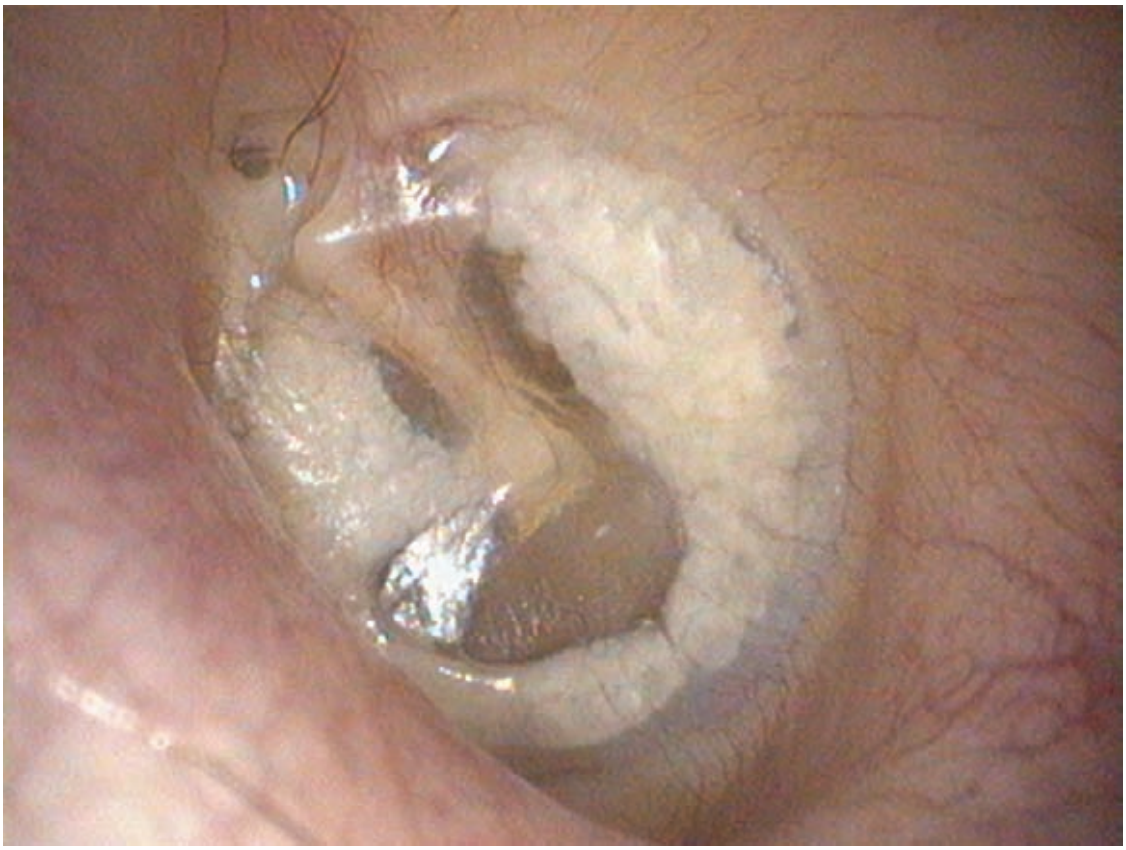


FIGURE 1.6 Tympanosclerosis.

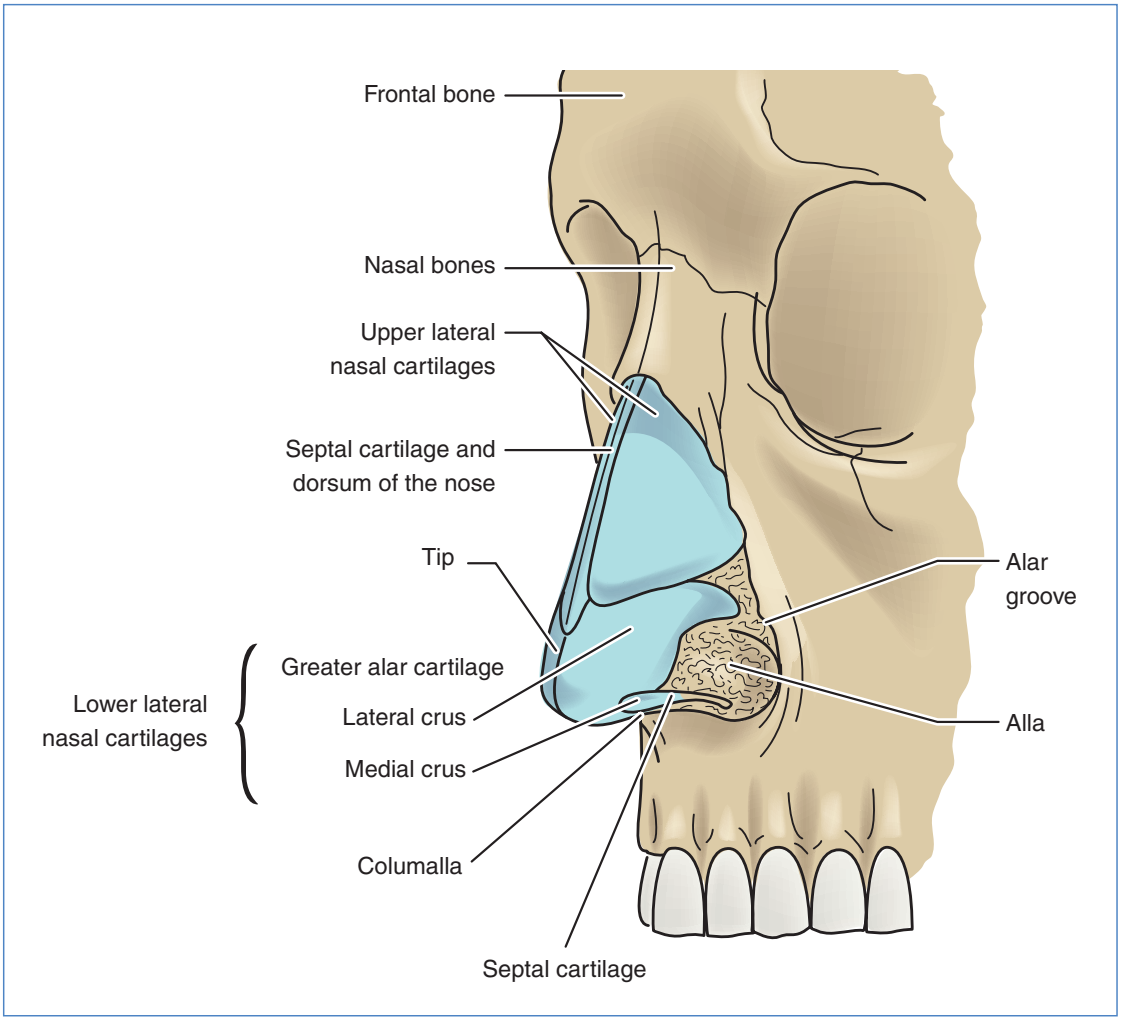


FIGURE 1.7 External nose.

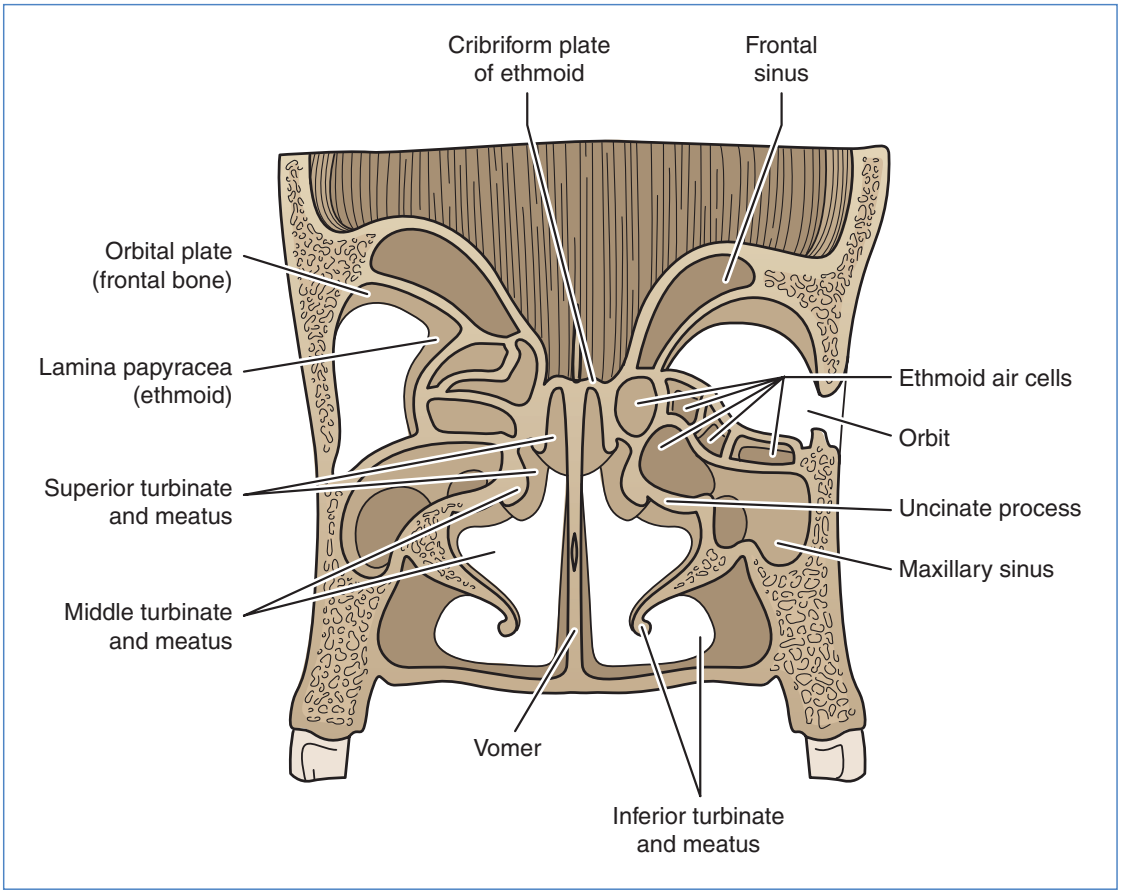


FIGURE 1.8 Paranasal sinuses.

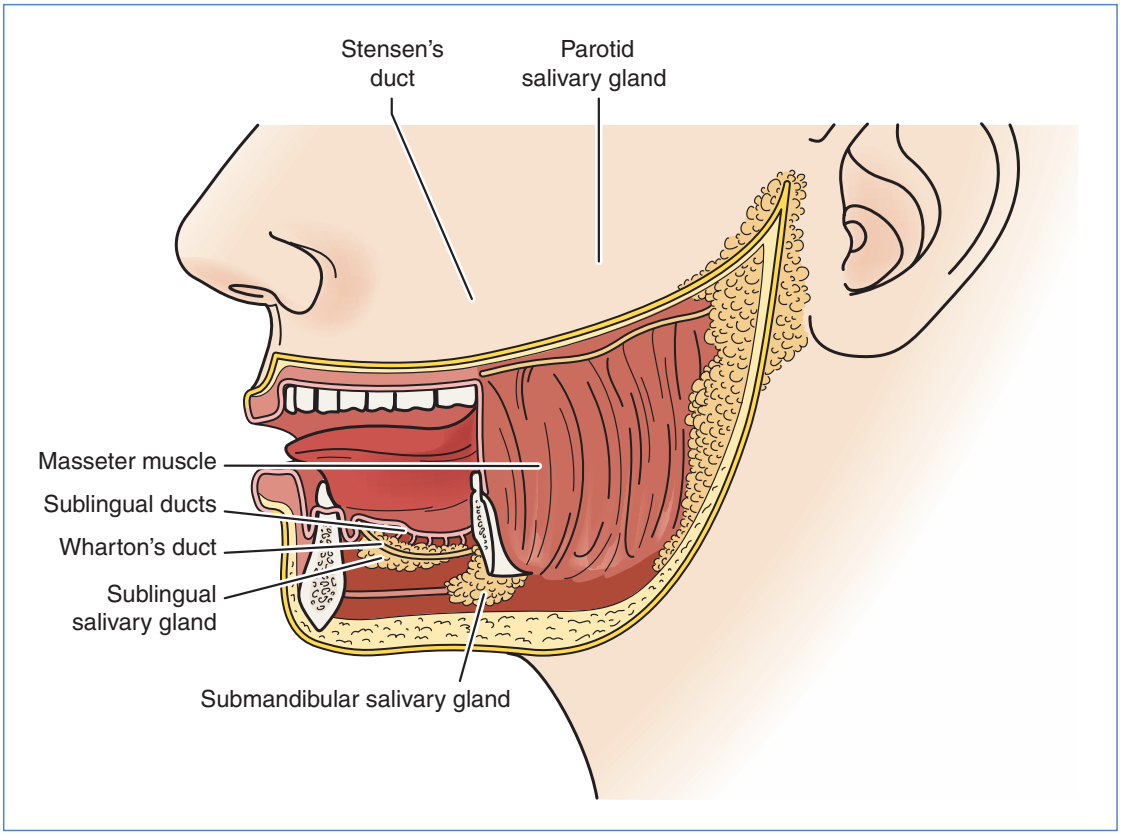


FIGURE 1.9 Salivary glands.

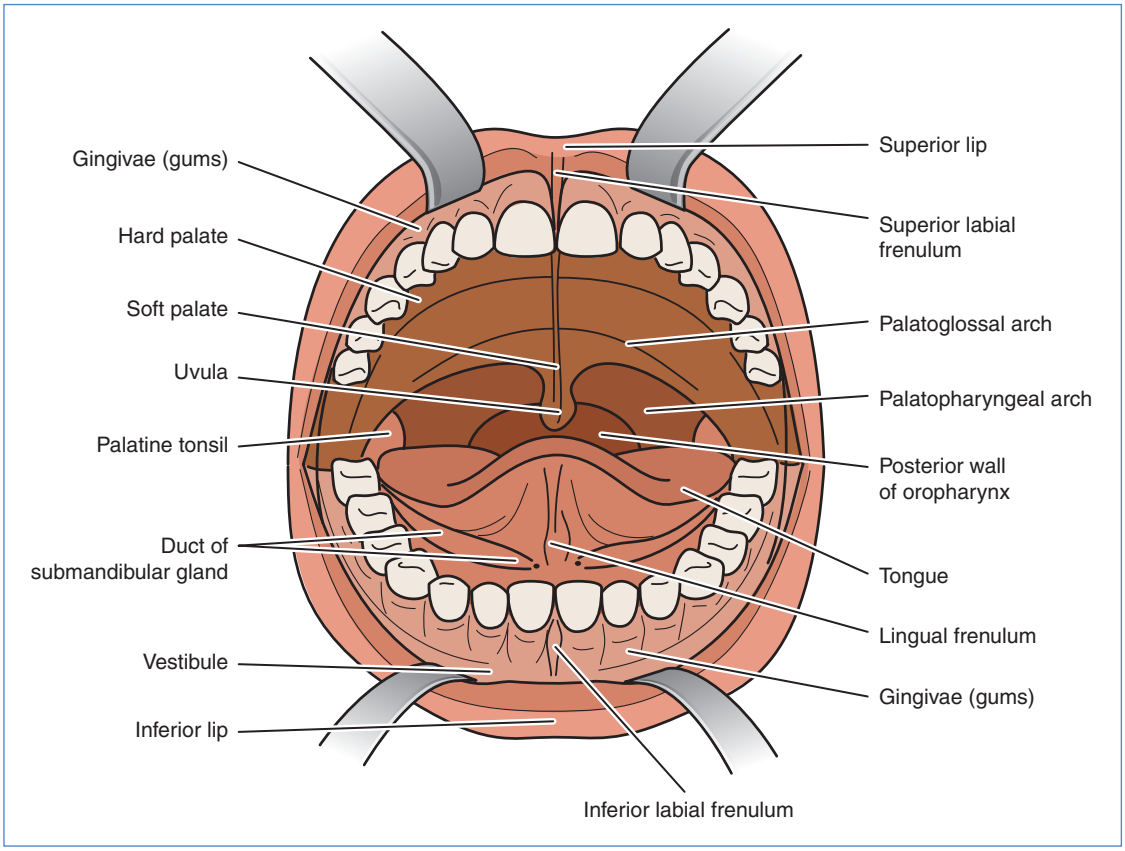


FIGURE 1.10 Oral cavity and oropharynx.

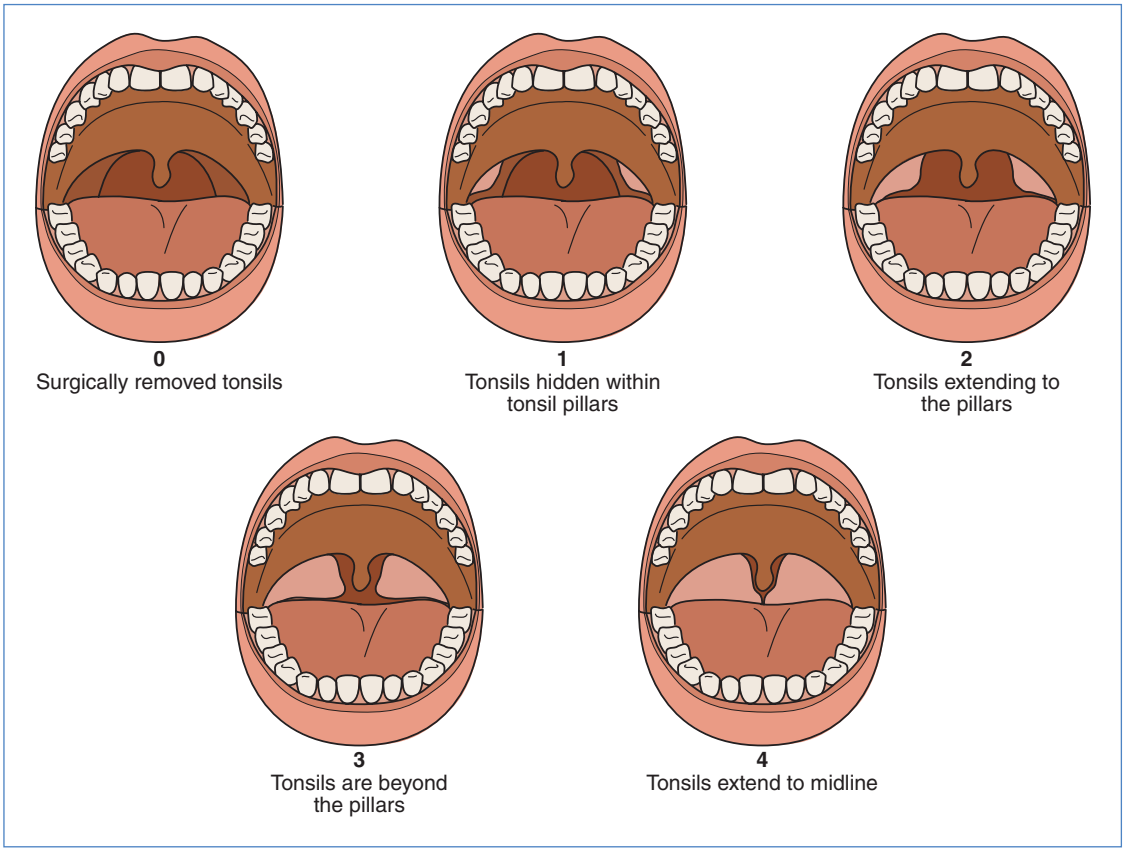


FIGURE 1.11 Tonsil size scoring.

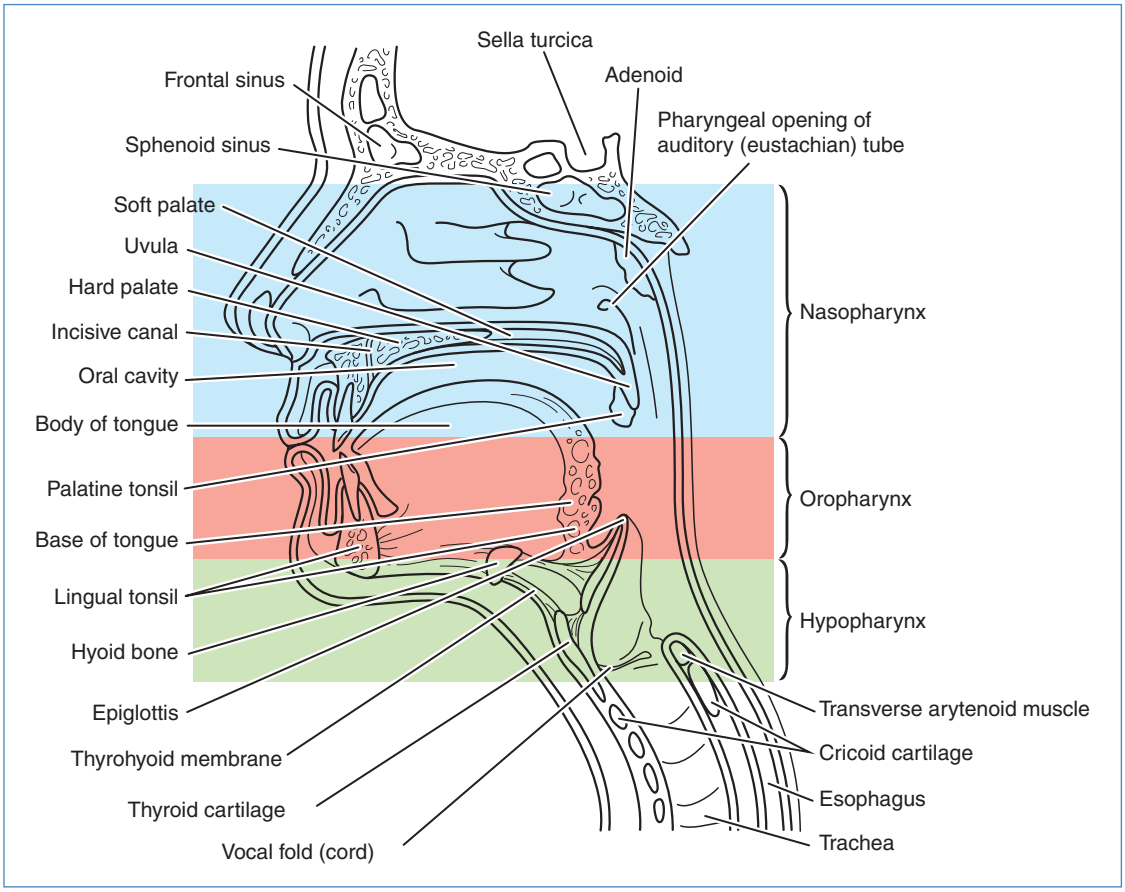


FIGURE 1.12 Oropharynx, hypopharynx, trachea, and larynx.

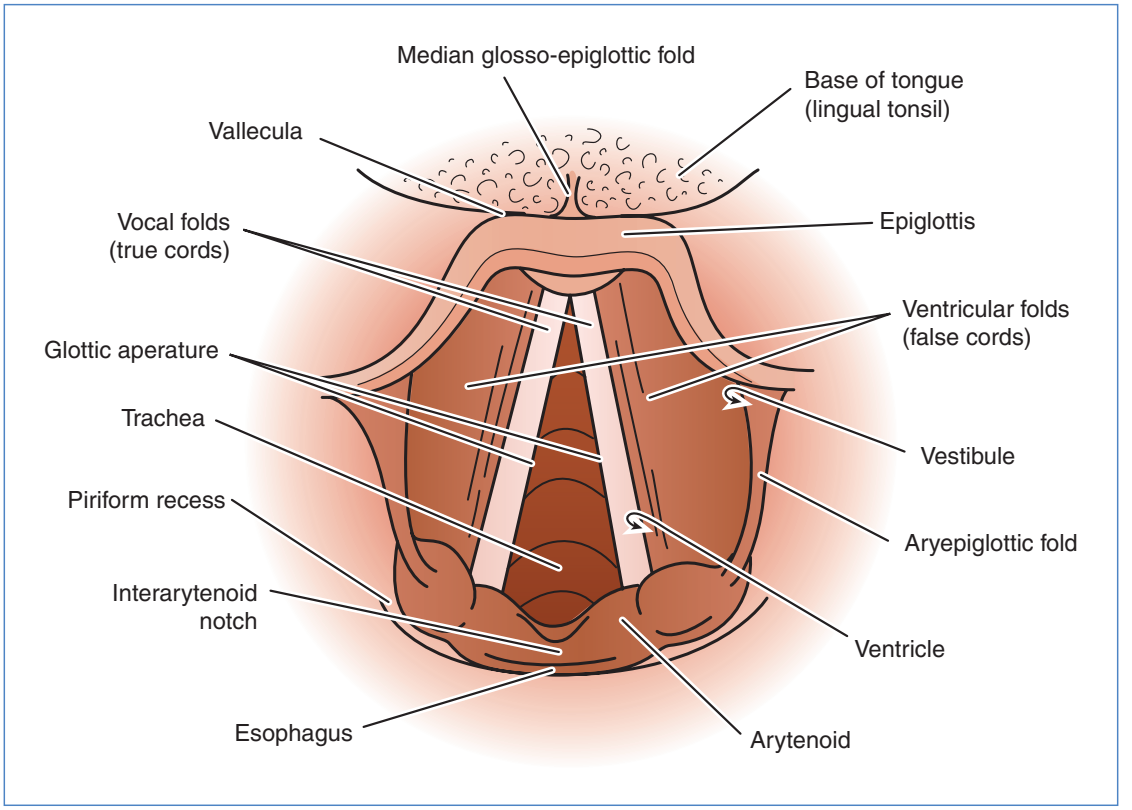


FIGURE 1.13 Larynx landmarks.

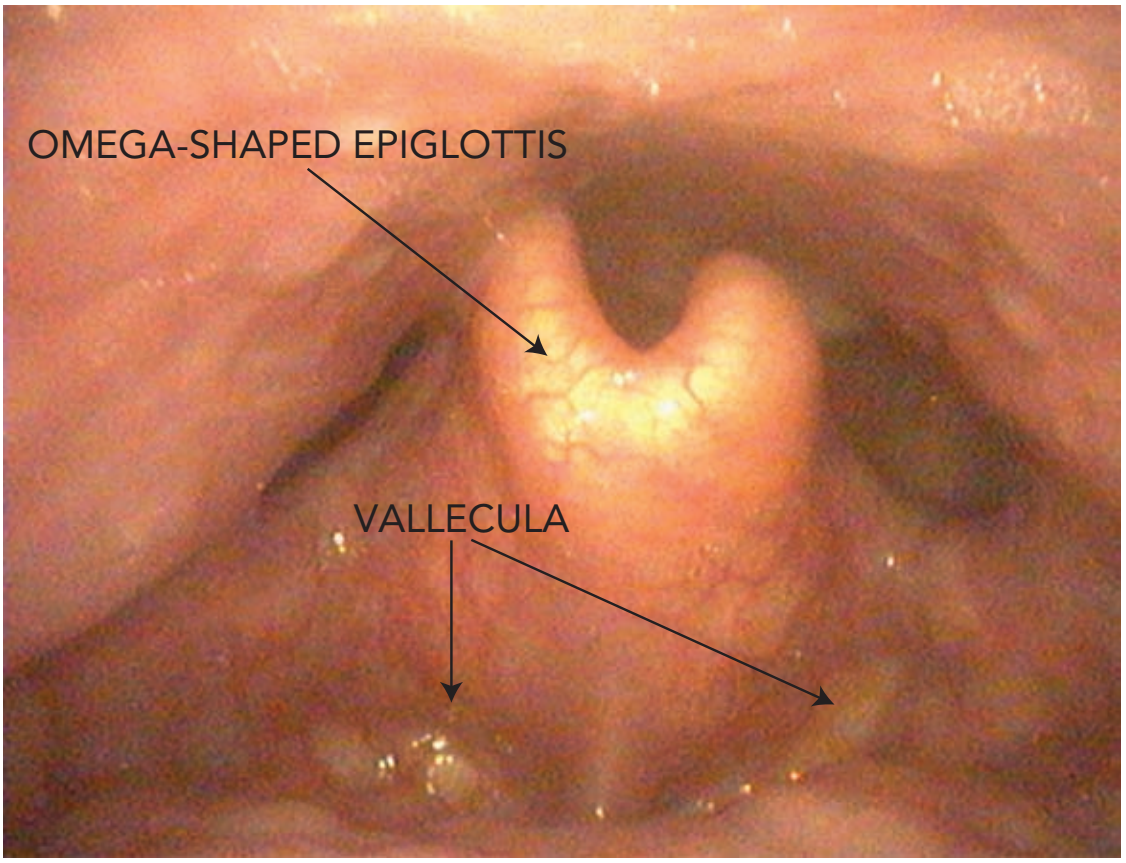


FIGURE 1.14 Omega-shaped epiglottis and vallecula.

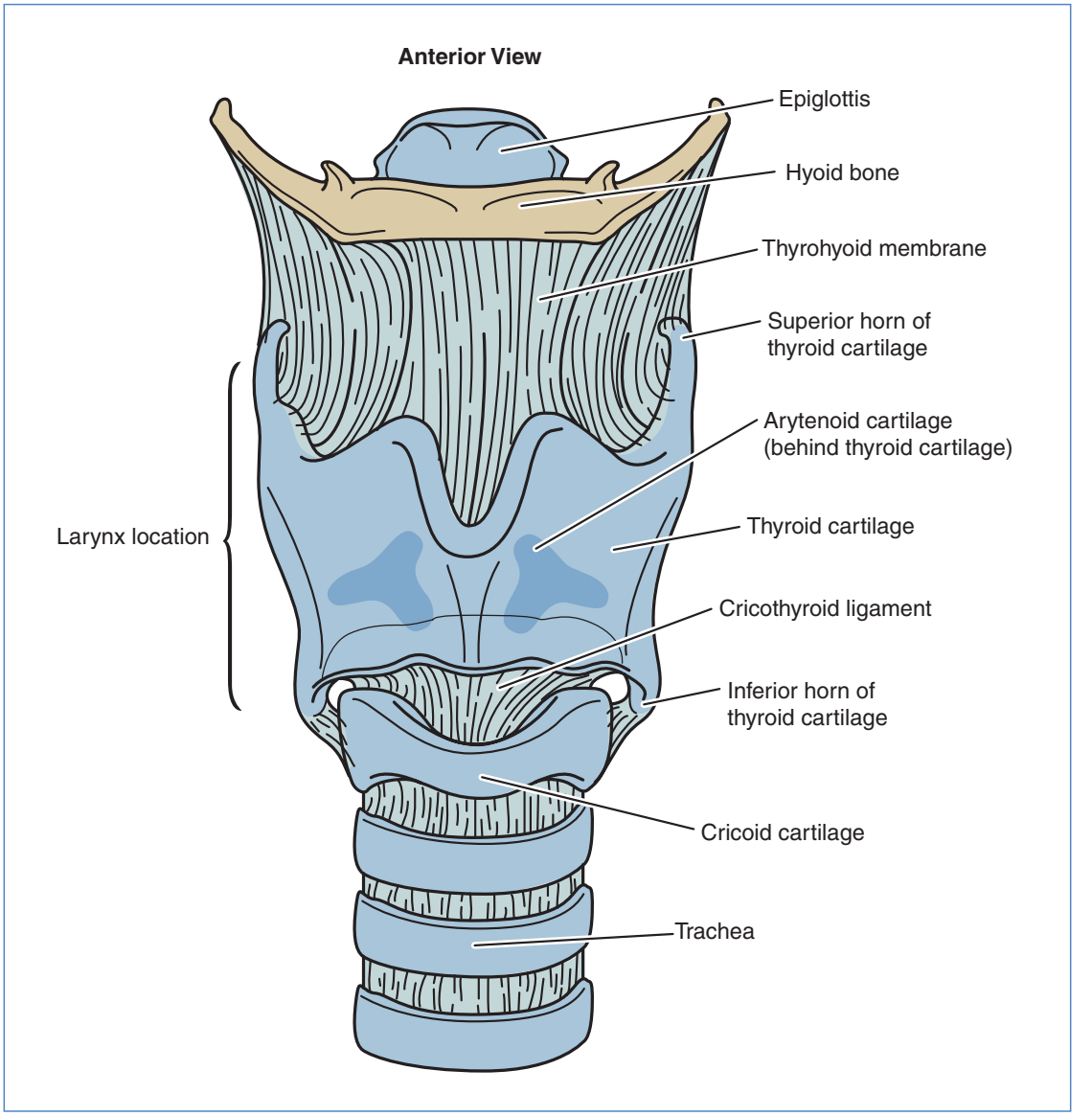


FIGURE 1.15 Cartilages of larynx.

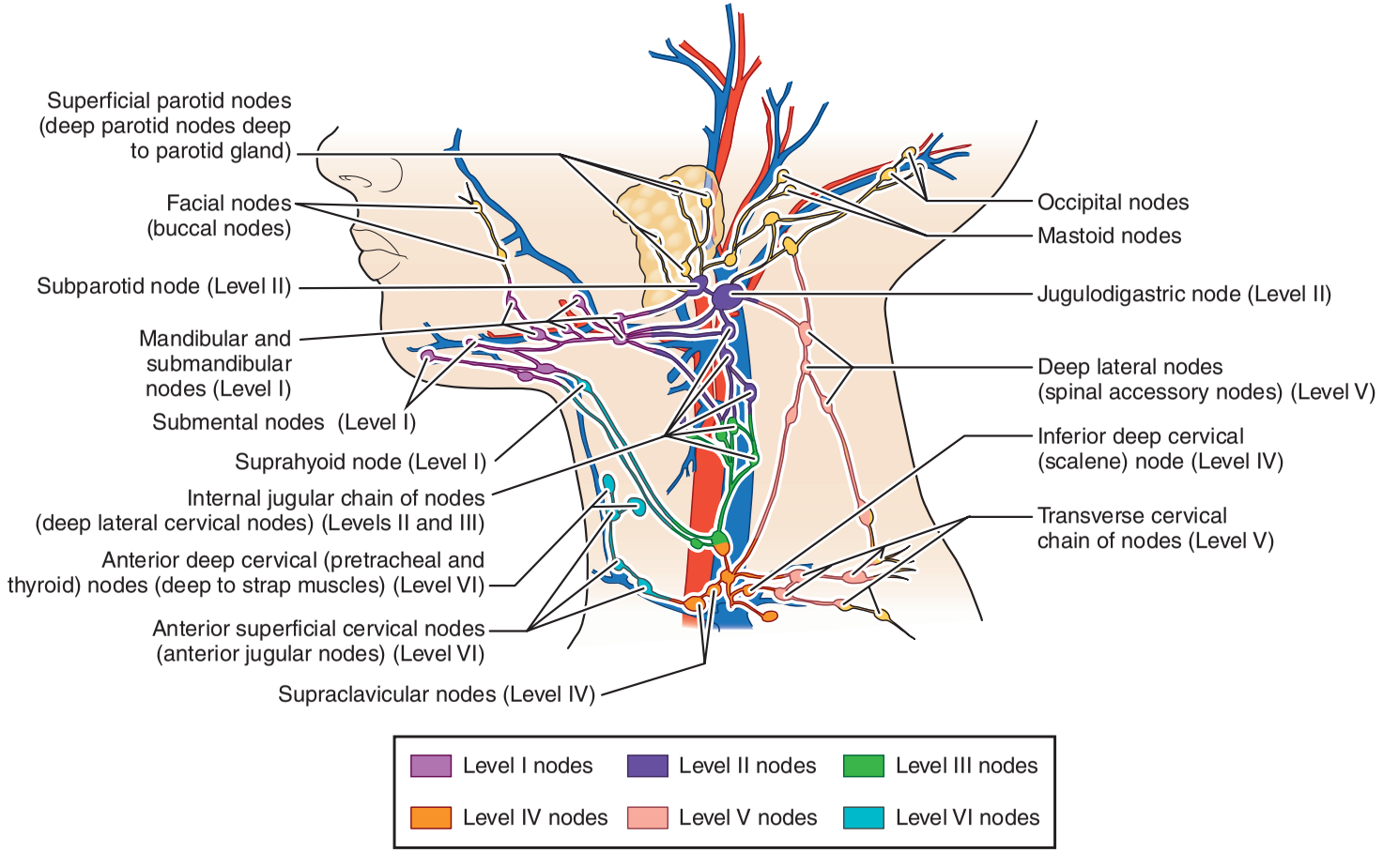


FIGURE 1.16 Neck: Lymphatic system and node groups.

Ear, Nose, and Throat Anatomy and Physiology Normal Findings

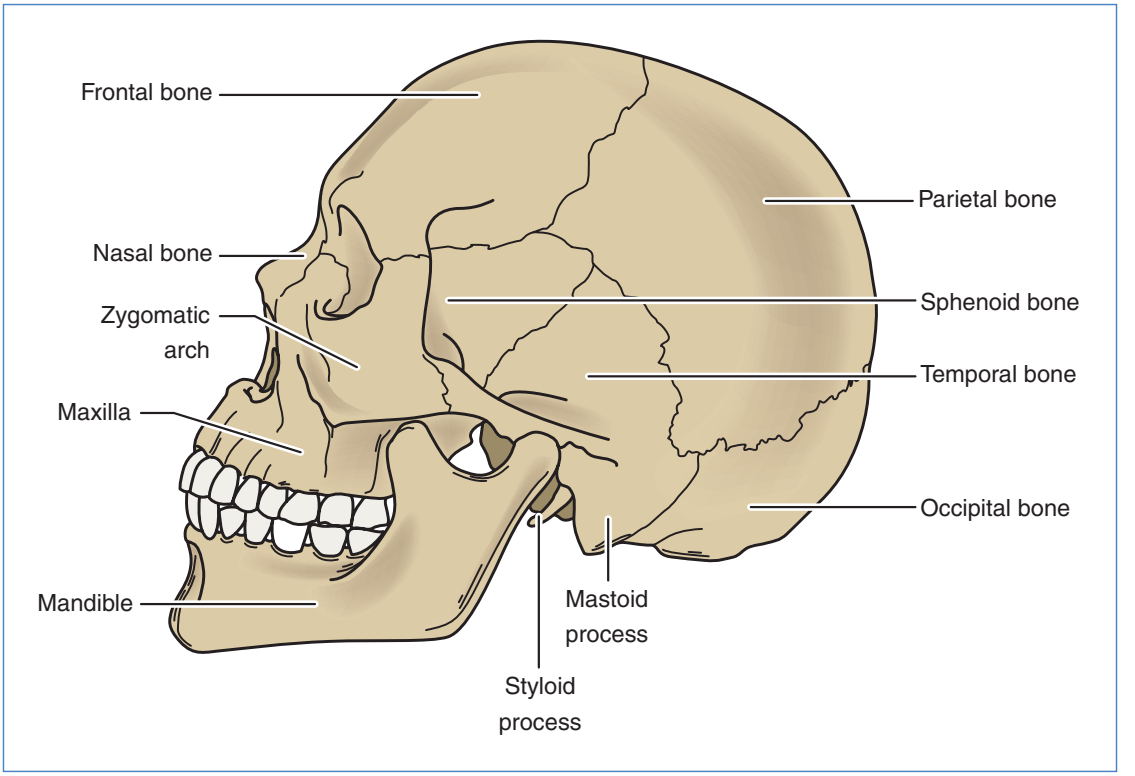


FIGURE 2.1 Skull bone landmarks.

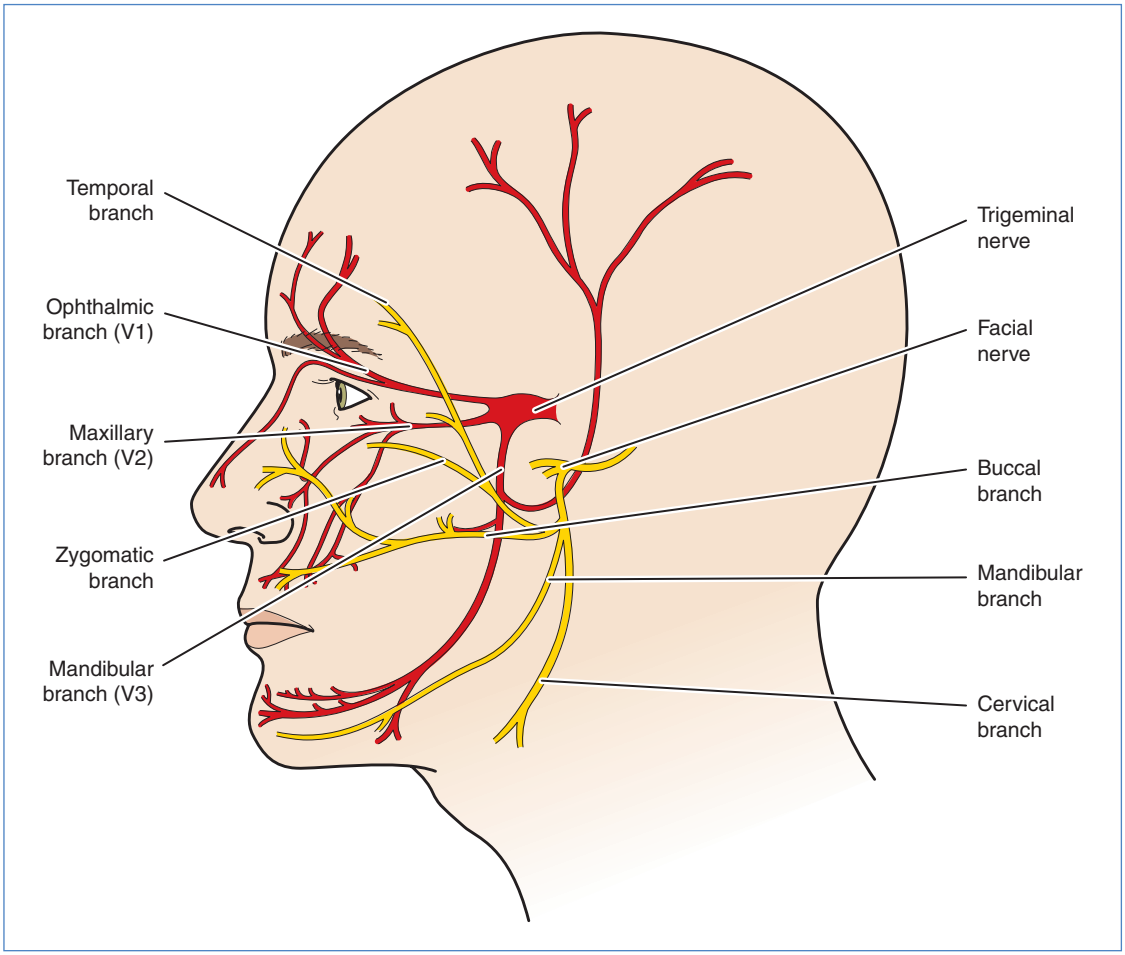


FIGURE 2.2 Trigeminal nerve and facial nerve branches.

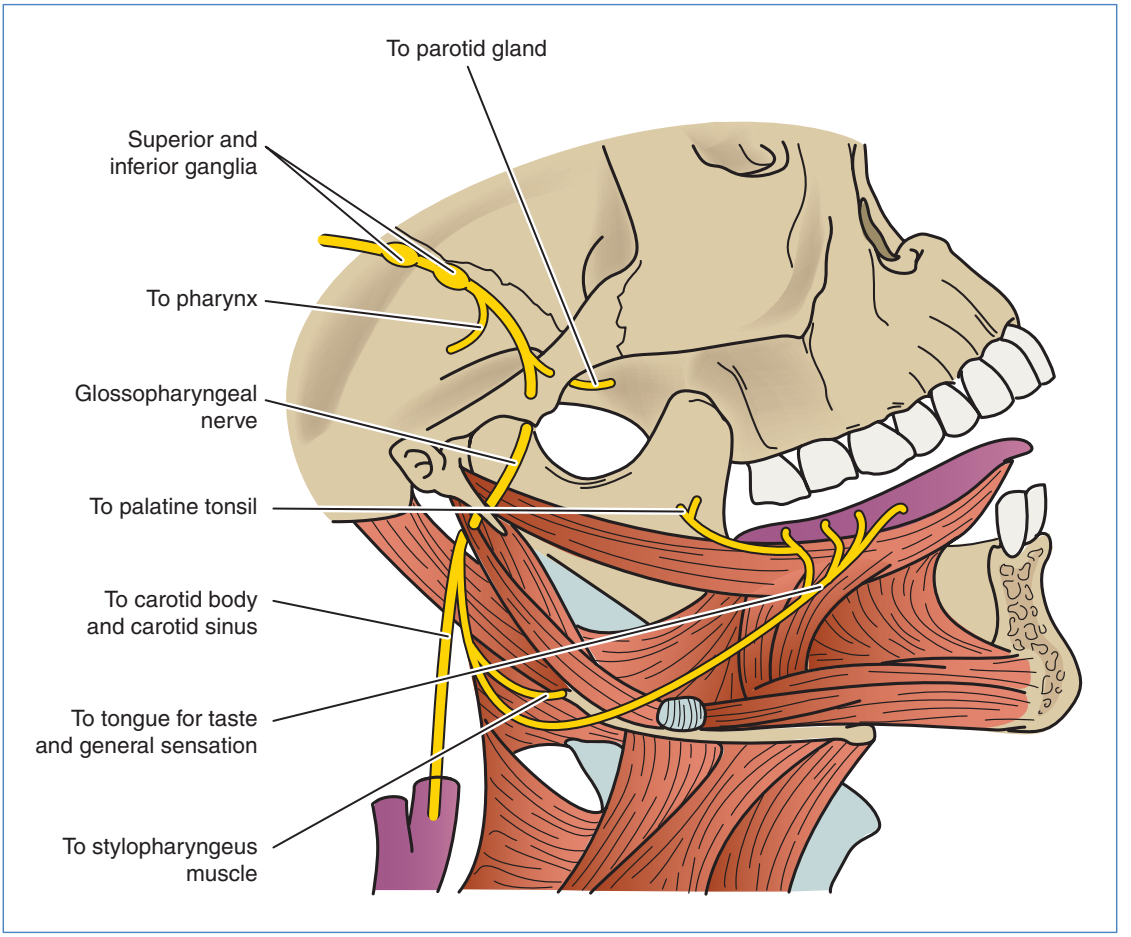


FIGURE 2.3 Glossopharyngeal nerve.

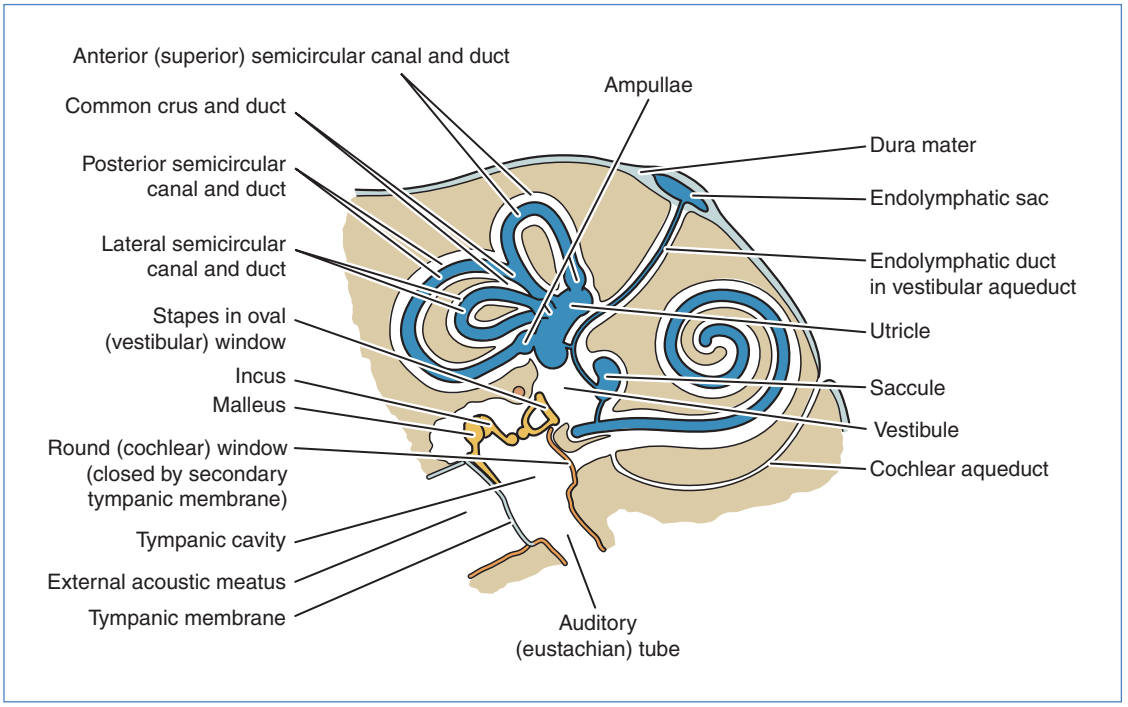


FIGURE 2.4 Middle and inner ear.

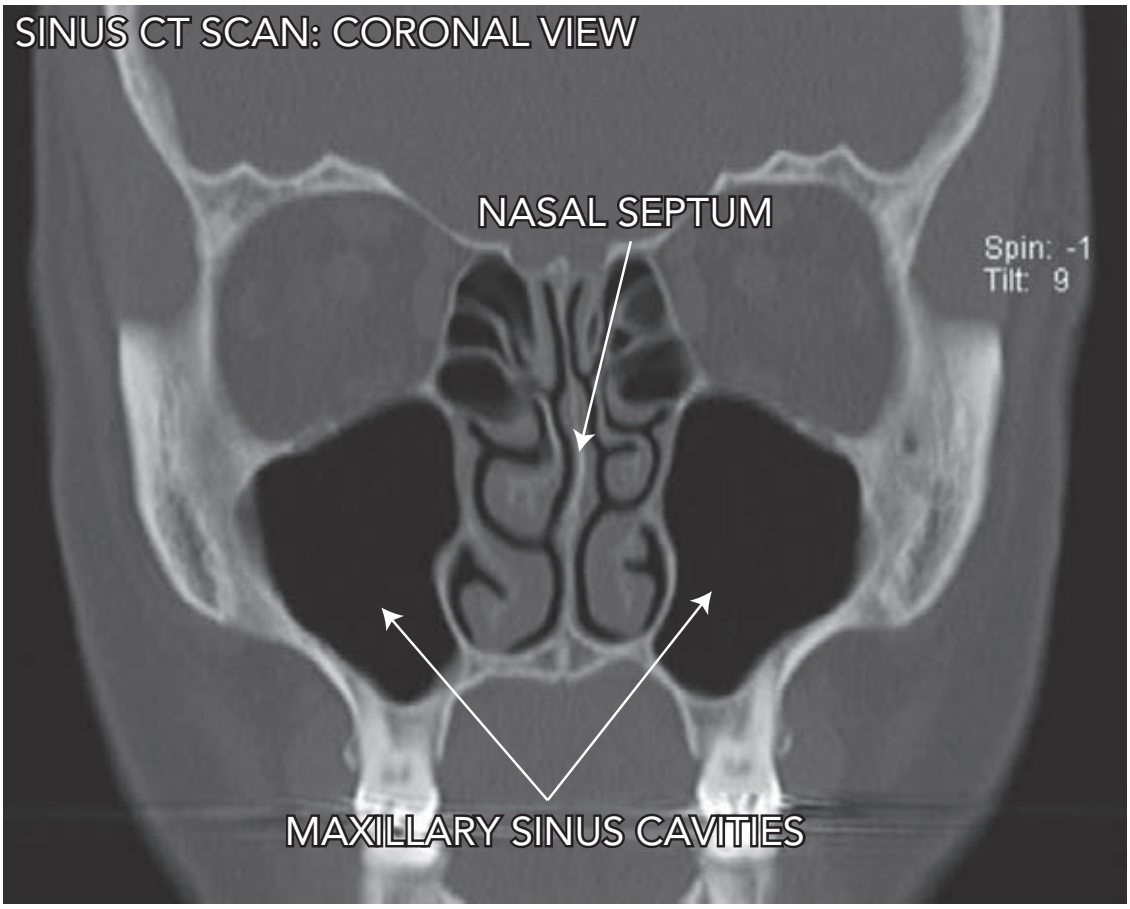


FIGURE 2.5 Maxillary sinuses.

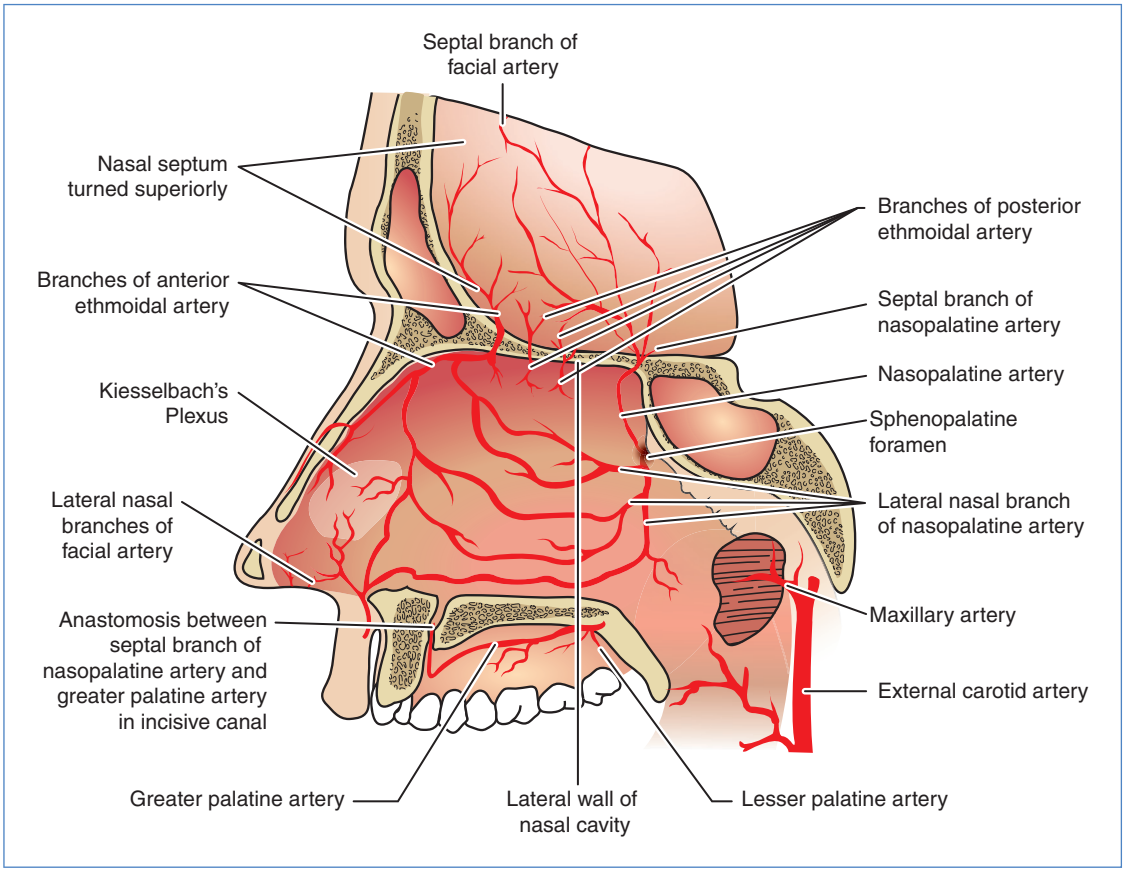


FIGURE 2.6 Arteries of nasal cavity.

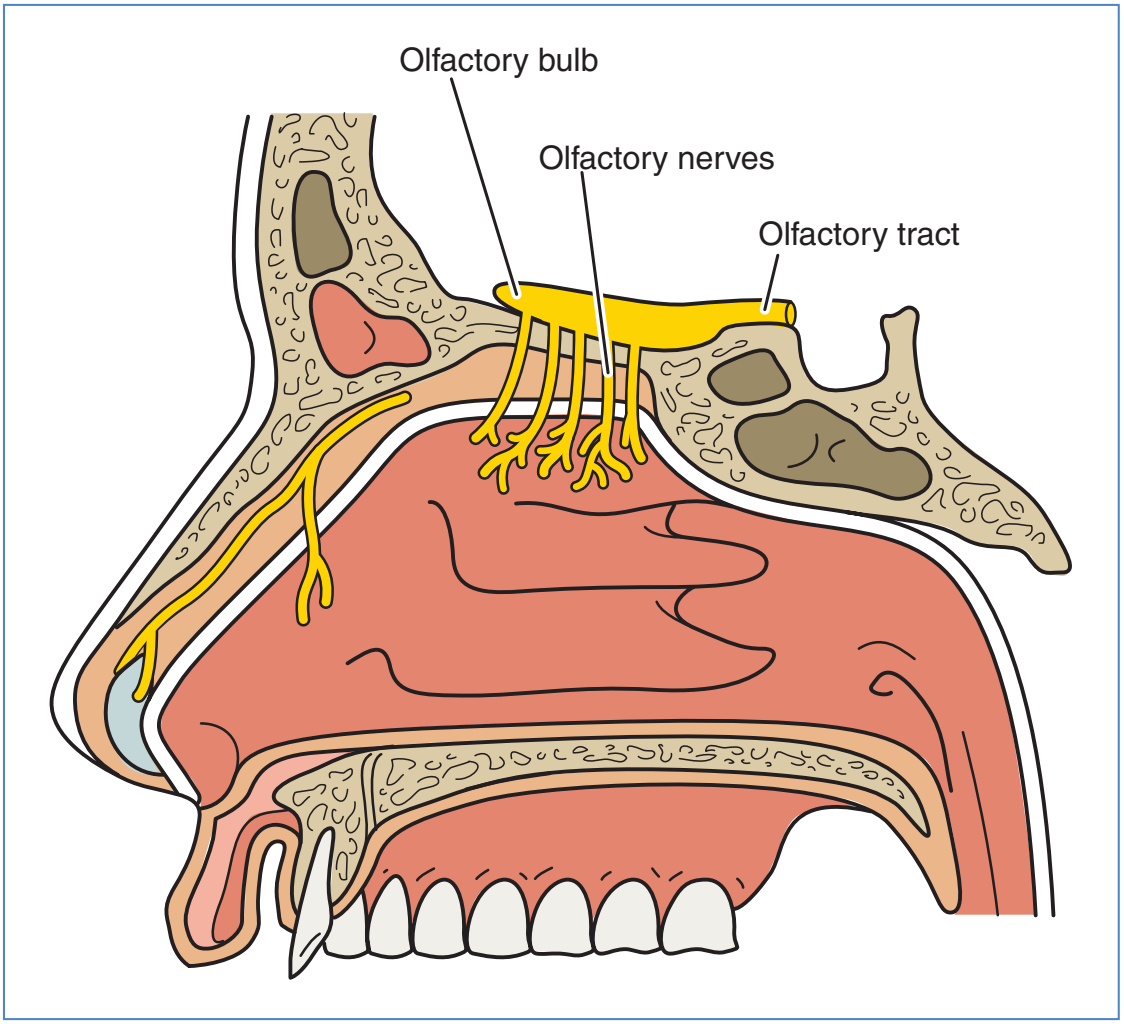


FIGURE 2.7 Olfactory nerve.

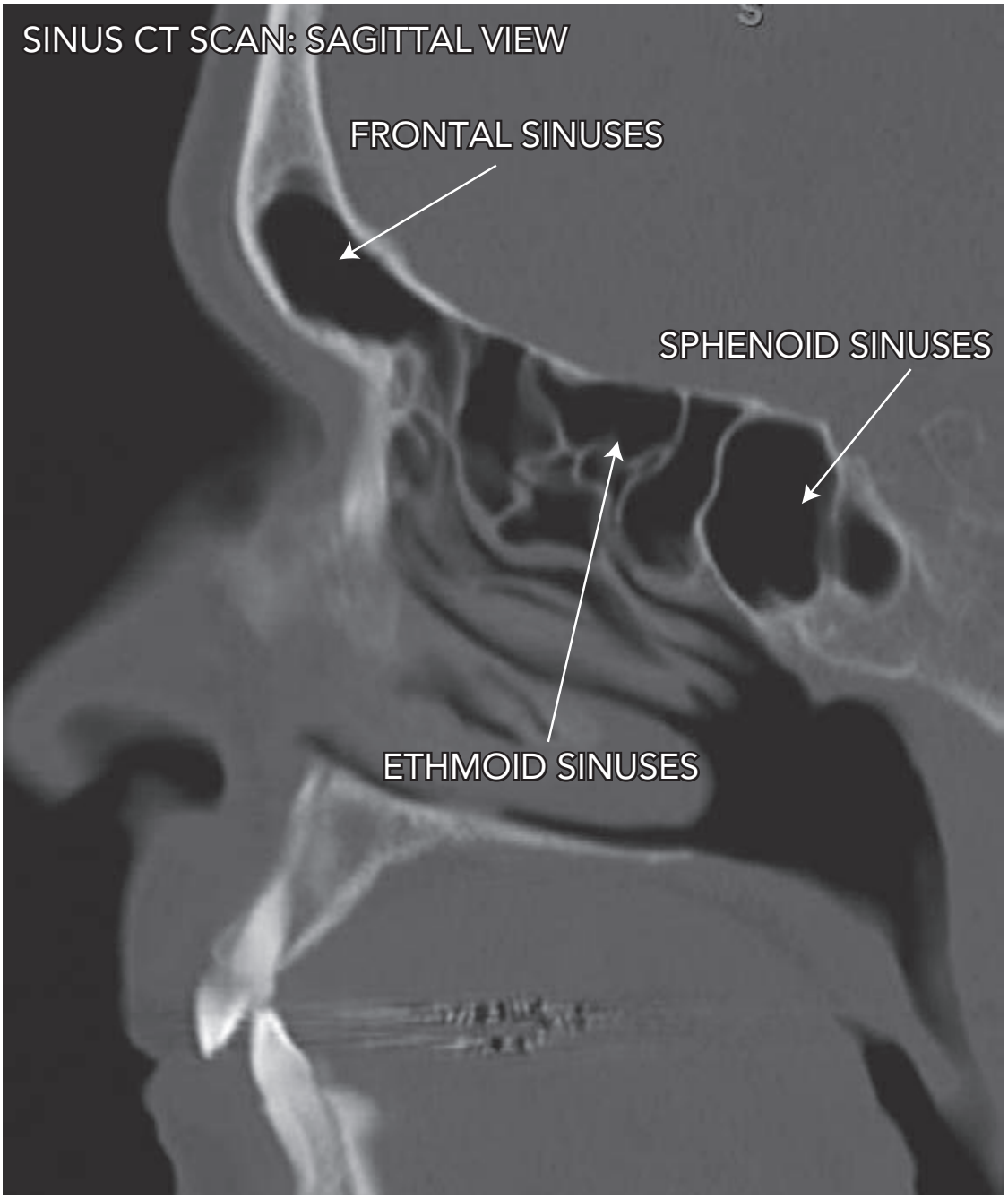


FIGURE 2.8 Frontal, ethmoid, and sphenoid sinuses.

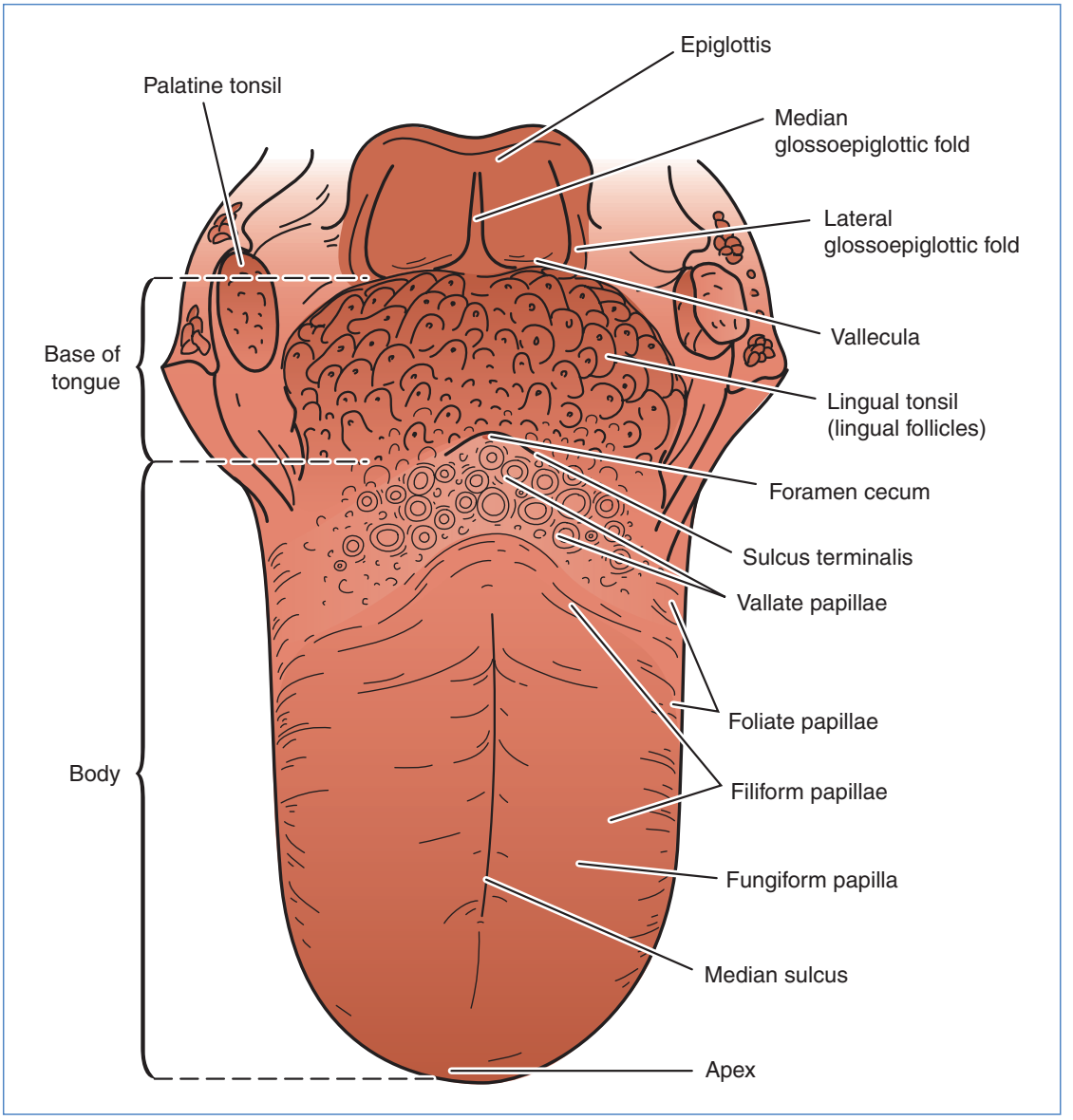


FIGURE 2.9 Oral cavity, tongue, and oropharynx.

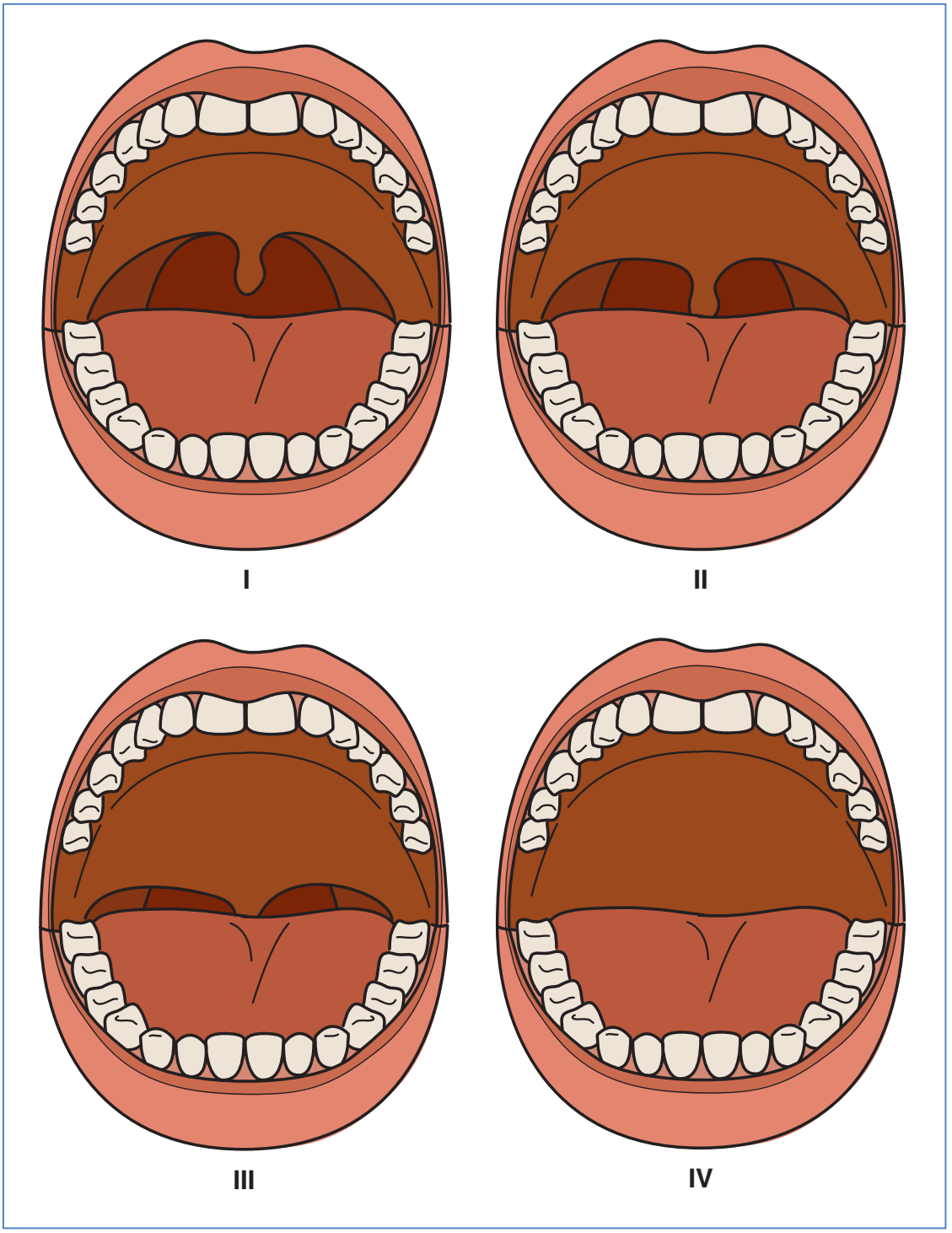


FIGURE 2.10 Mallampati Classification Score.

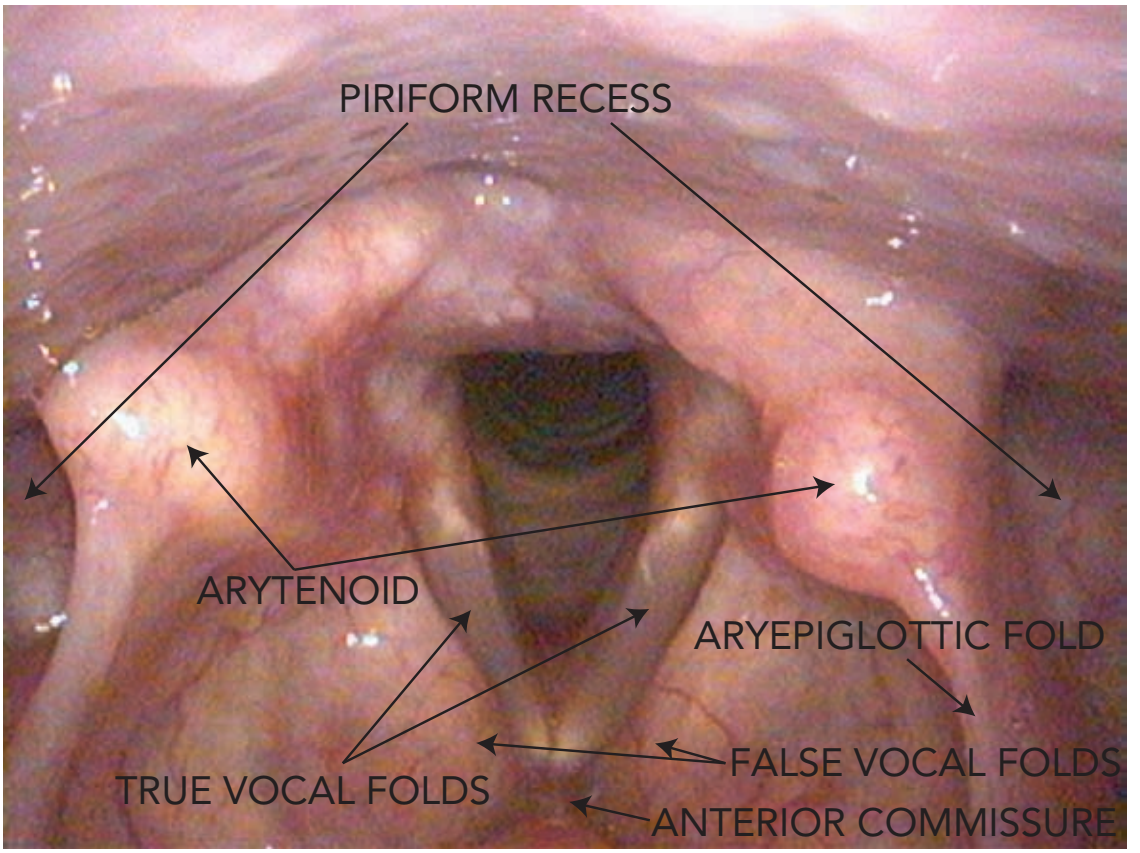


FIGURE 2.11 Larynx.

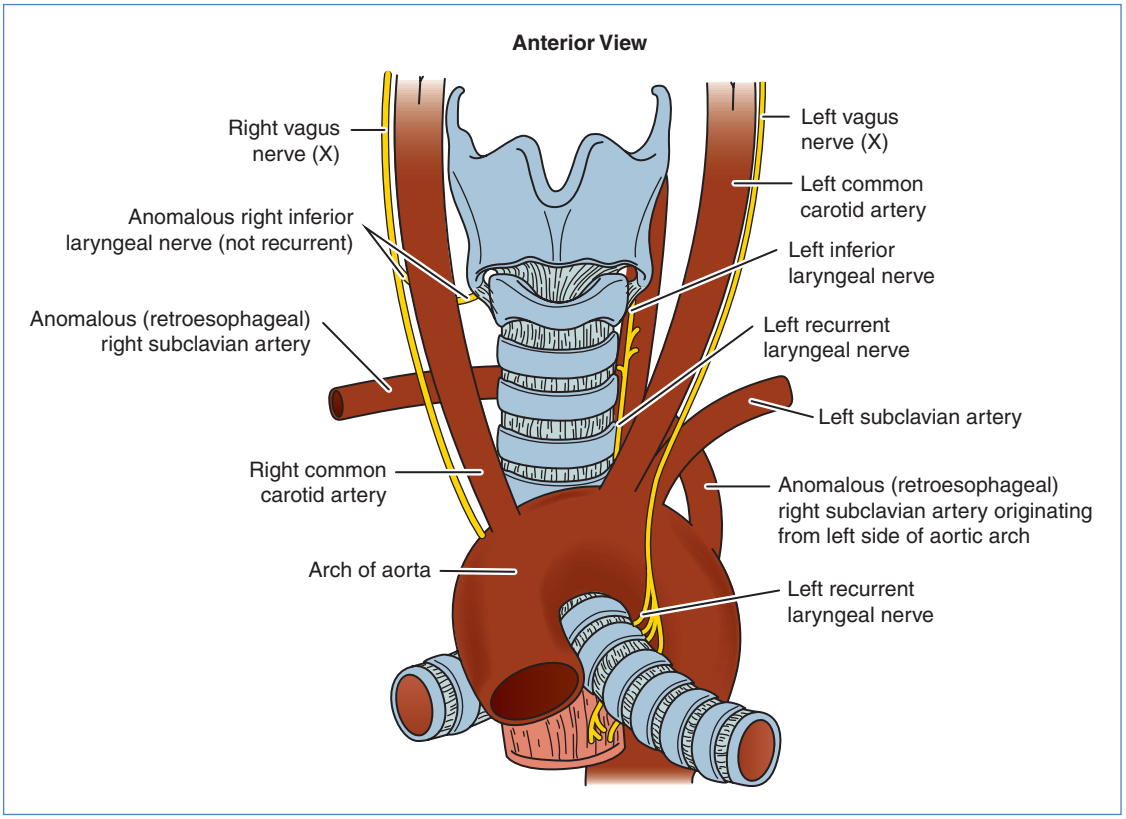


FIGURE 2.12 Anomalous neural and vascular anatomy of the larynx.

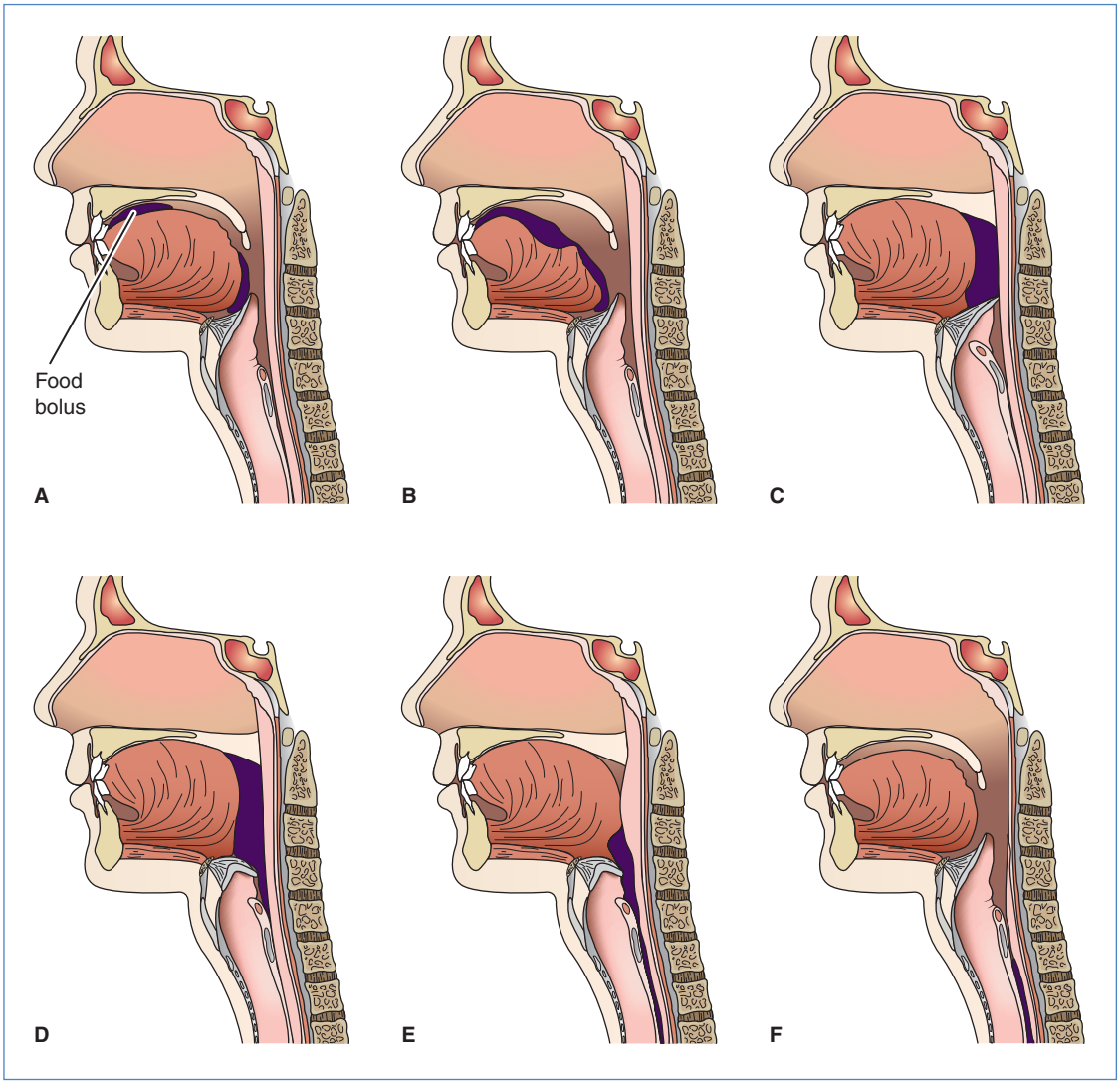


FIGURE 2.13 Normal swallowing.

Physical Examination of the Cranial Nerves for the Head and Neck

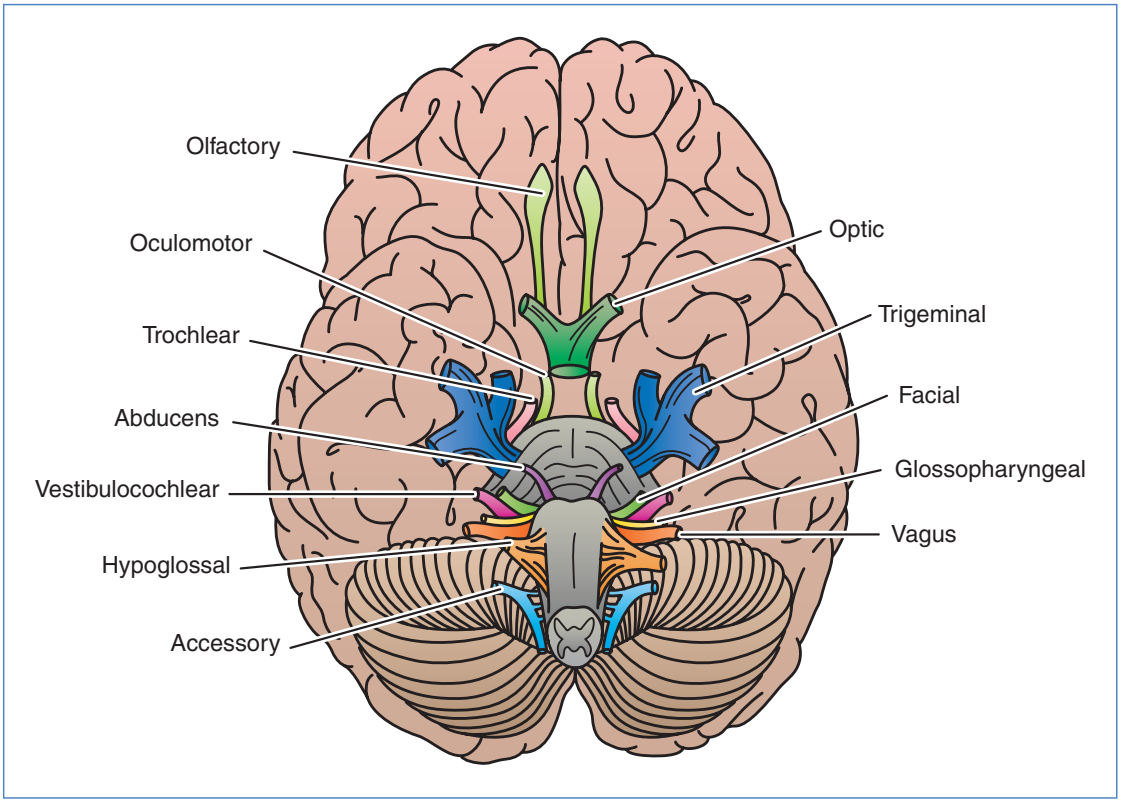


FIGURE 3.1 Cranial nerves.

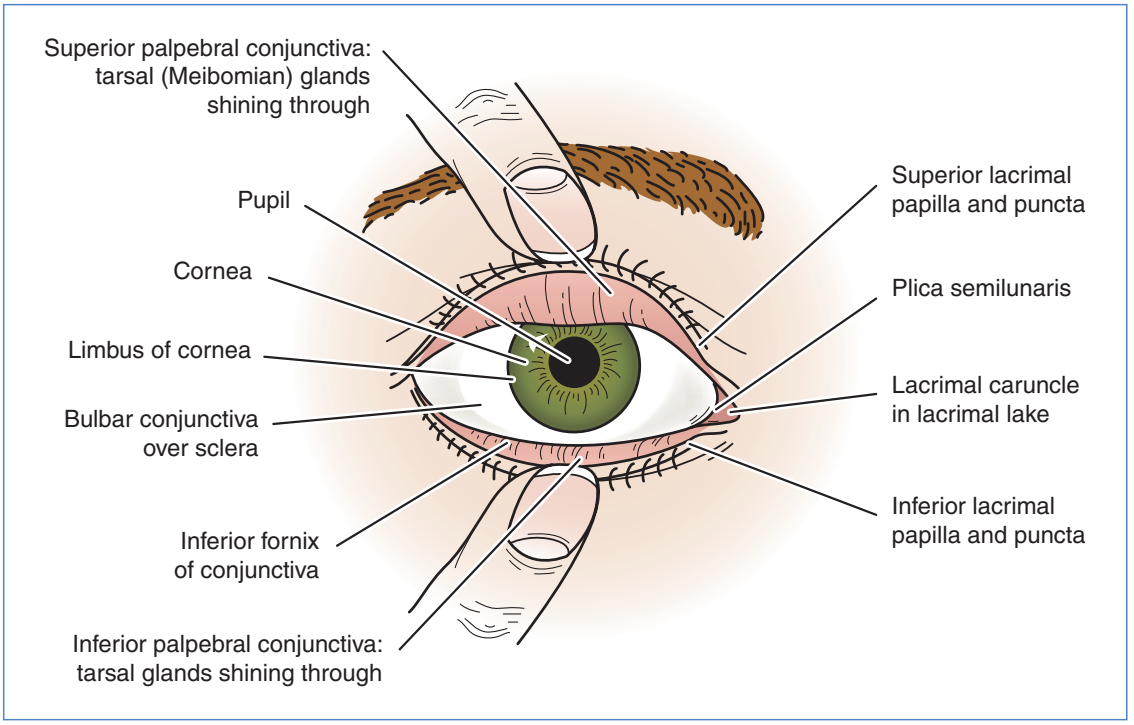


FIGURE 3.2 Eye anatomy.

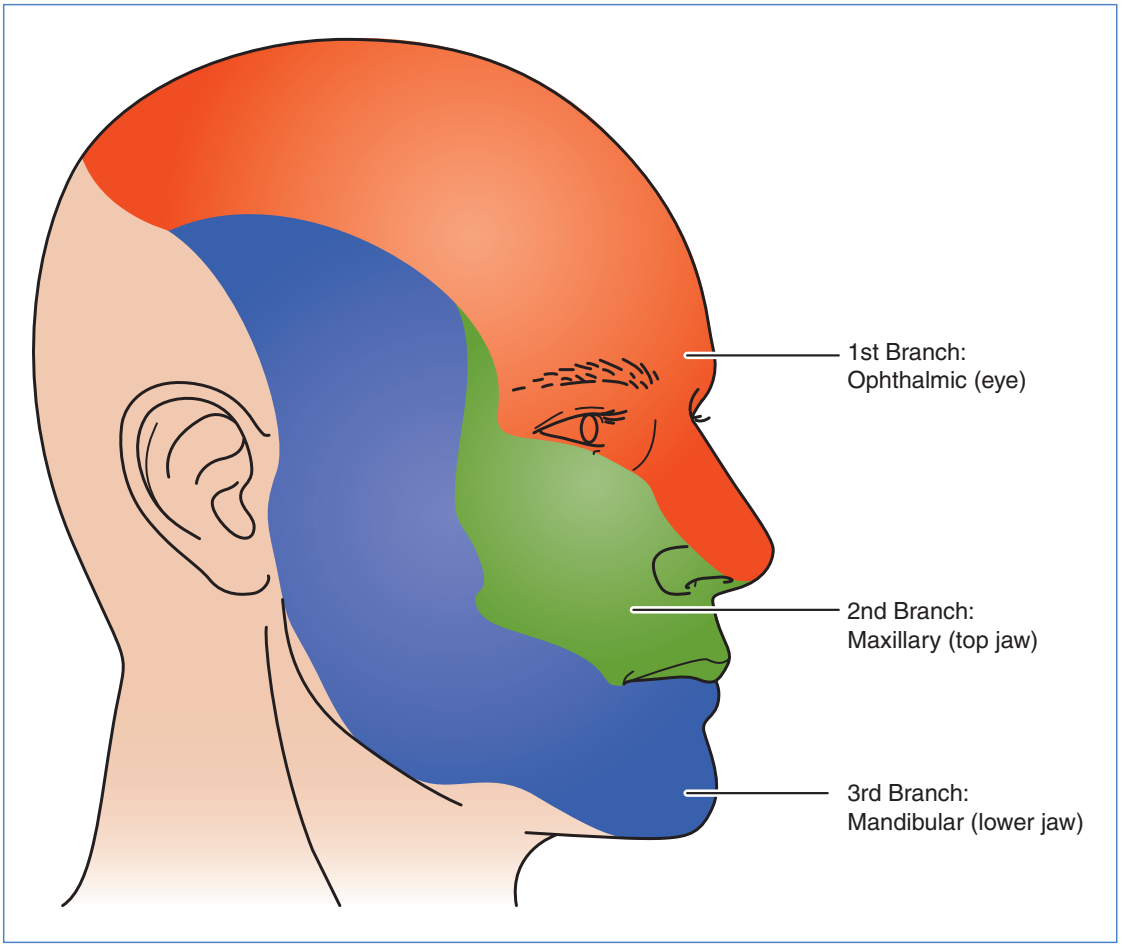


FIGURE 3.3 Trigeminal nerve branches: Sensory distribution.

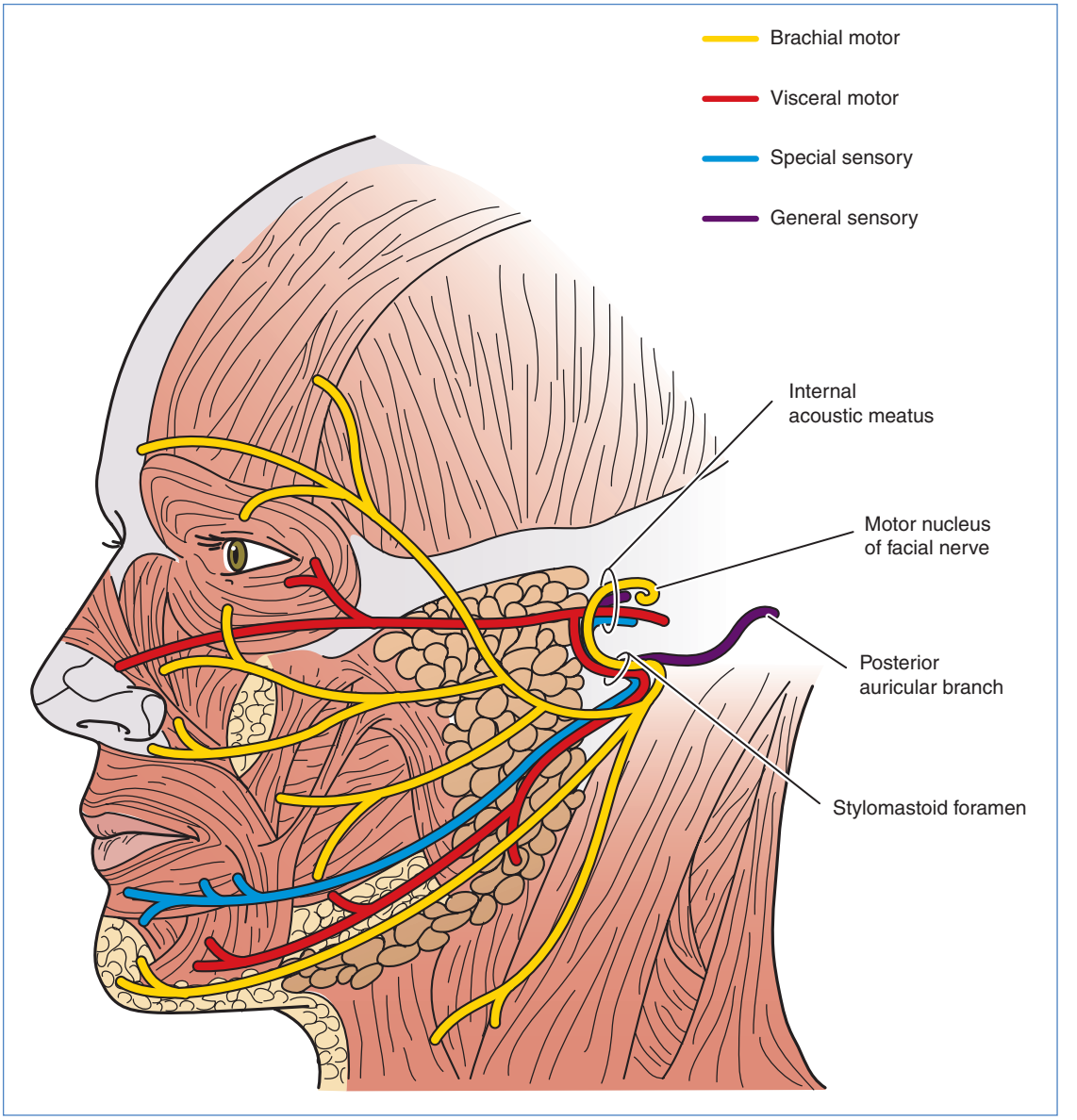


FIGURE 3.4 Facial nerve motor and sensory components.

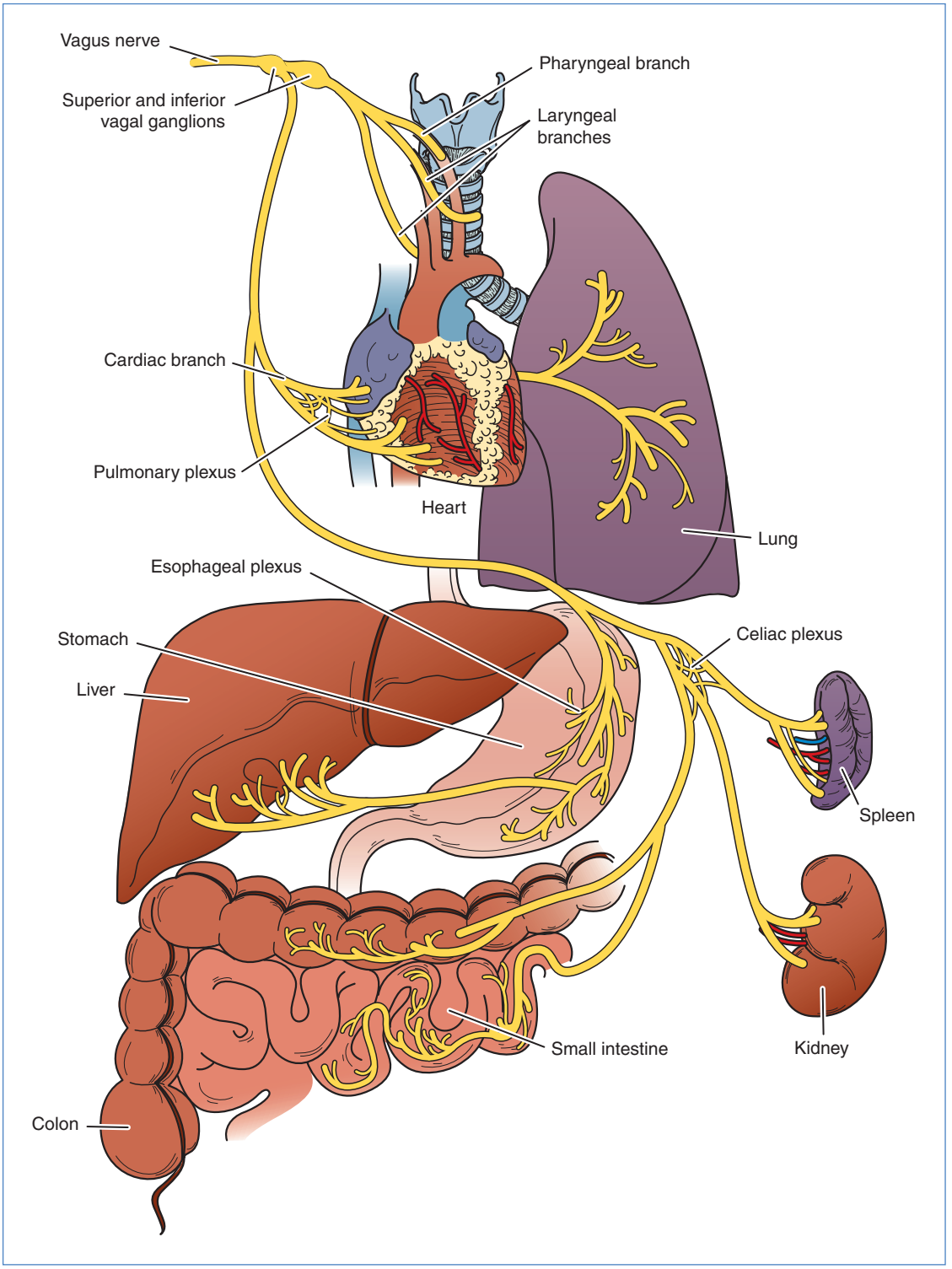


FIGURE 3.5 Vagus nerve distribution.

Evaluation and Management of Hearing and Tinnitus

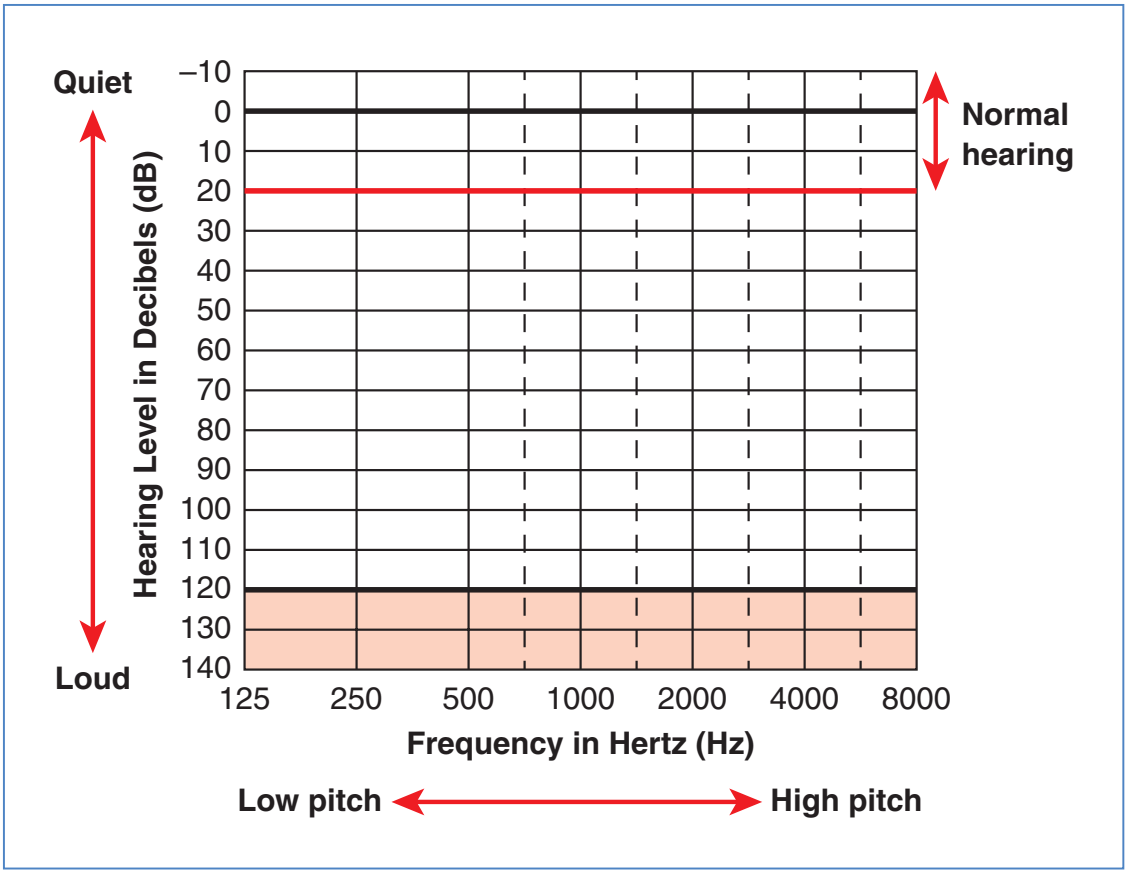


FIGURE 5.1 Audiogram.

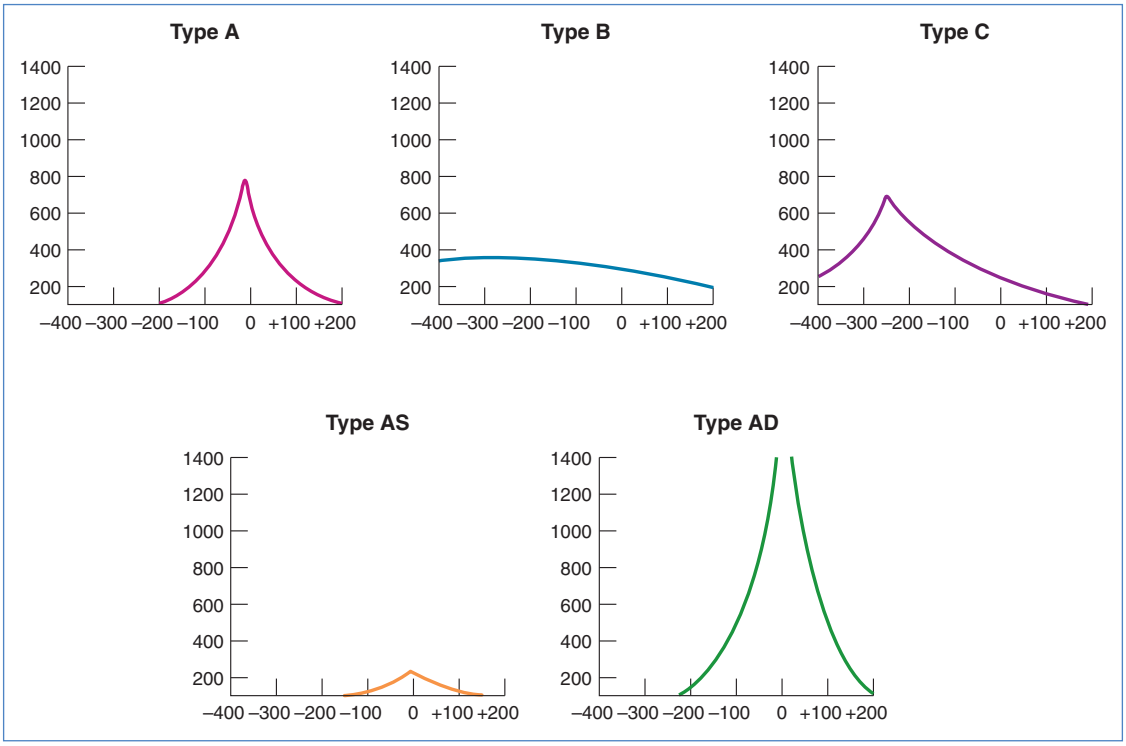


FIGURE 5.2 Tympanogram.

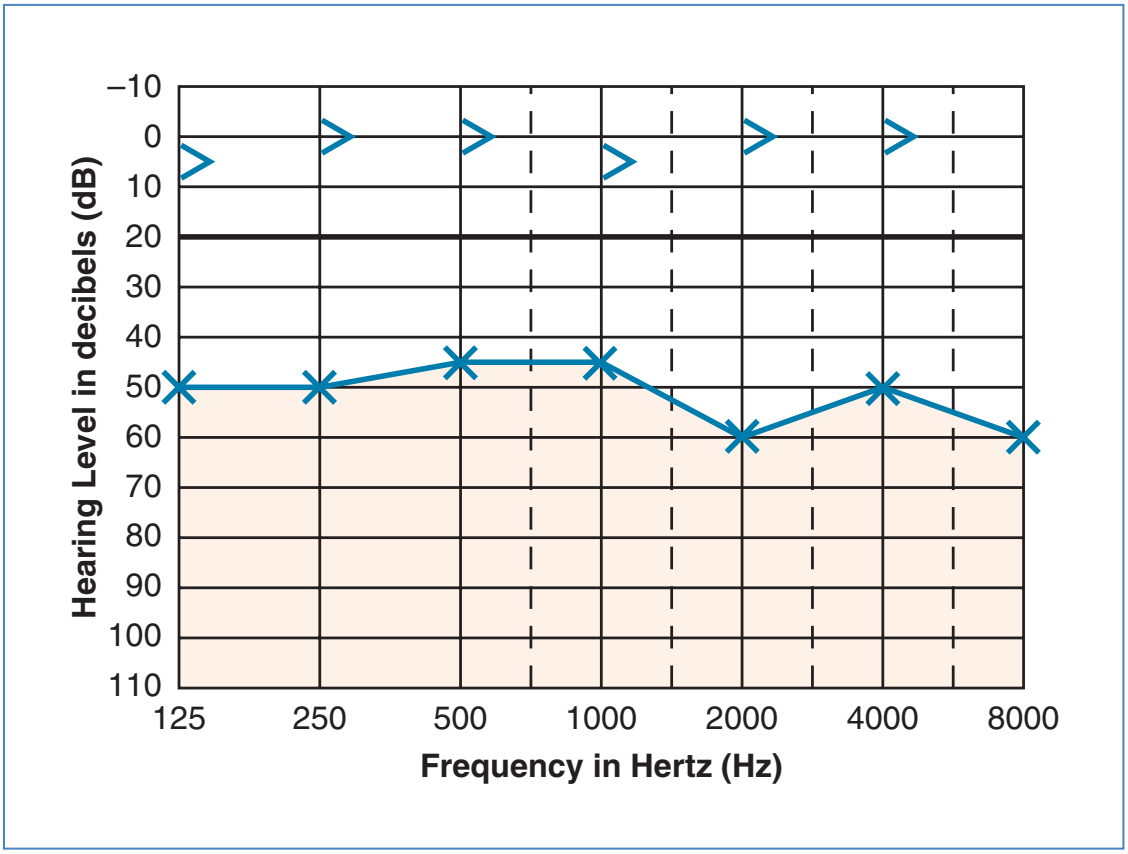


FIGURE 5.3 Conductive hearing loss (left ear).

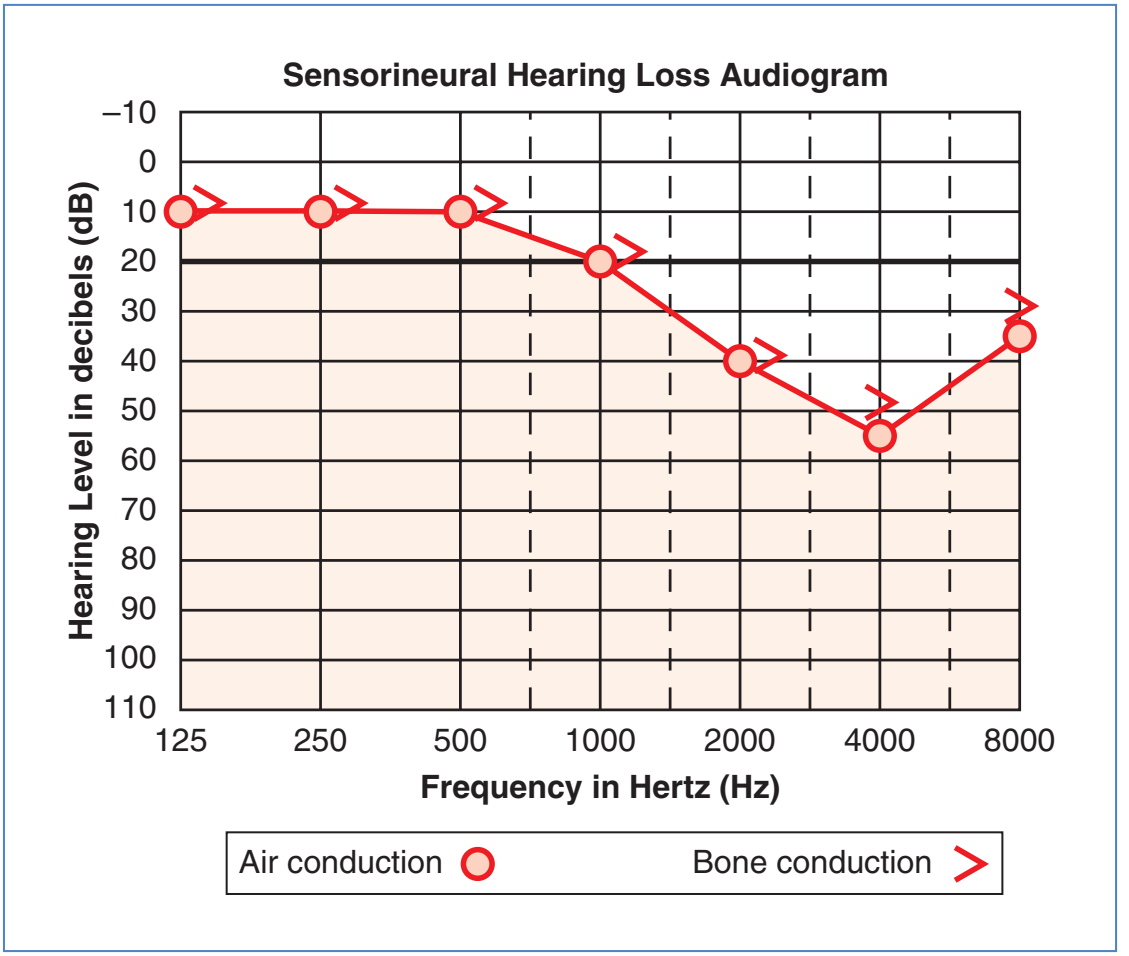


FIGURE 5.4 Sensorineural hearing loss (right ear).

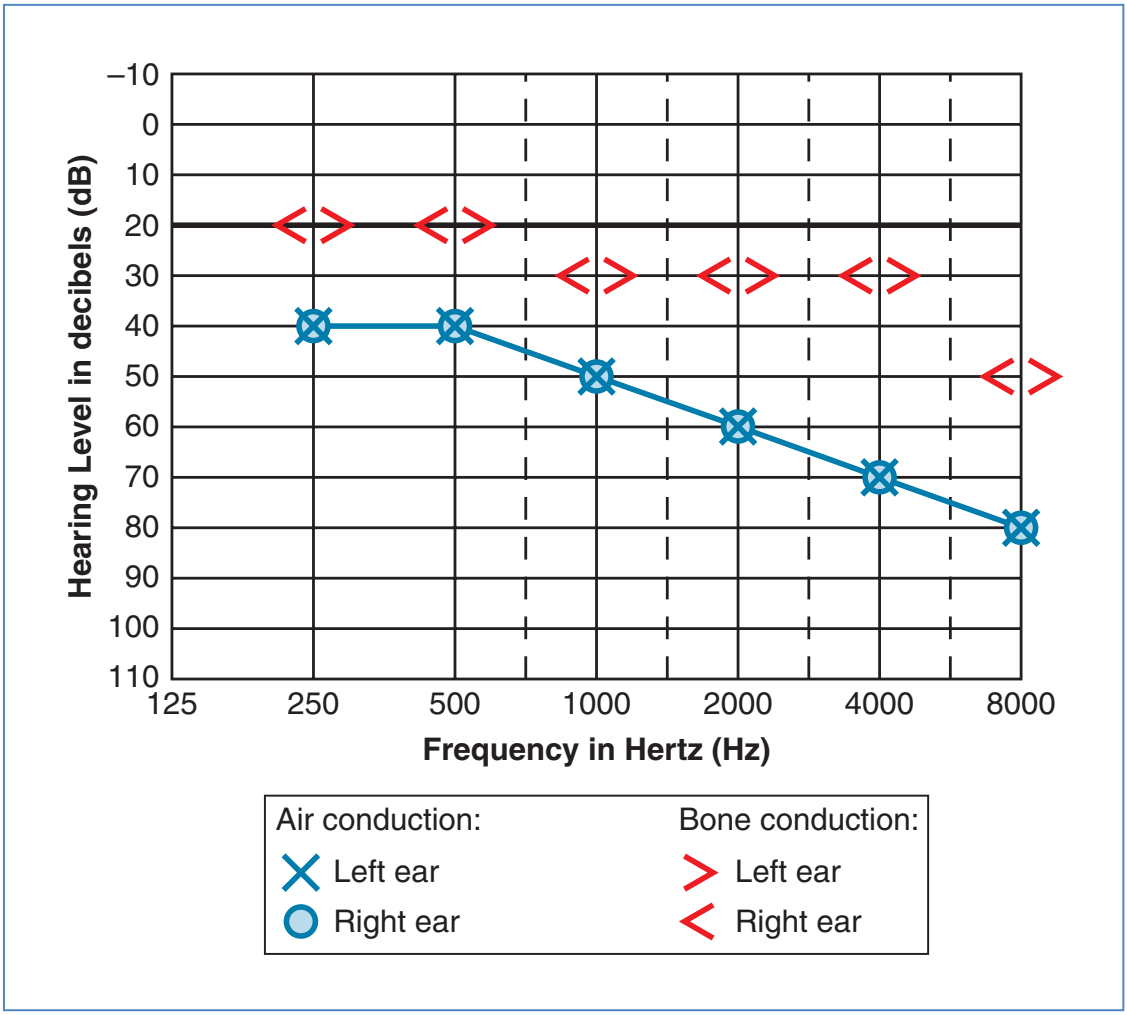


FIGURE 5.5 Mixed hearing loss (bilateral ears).

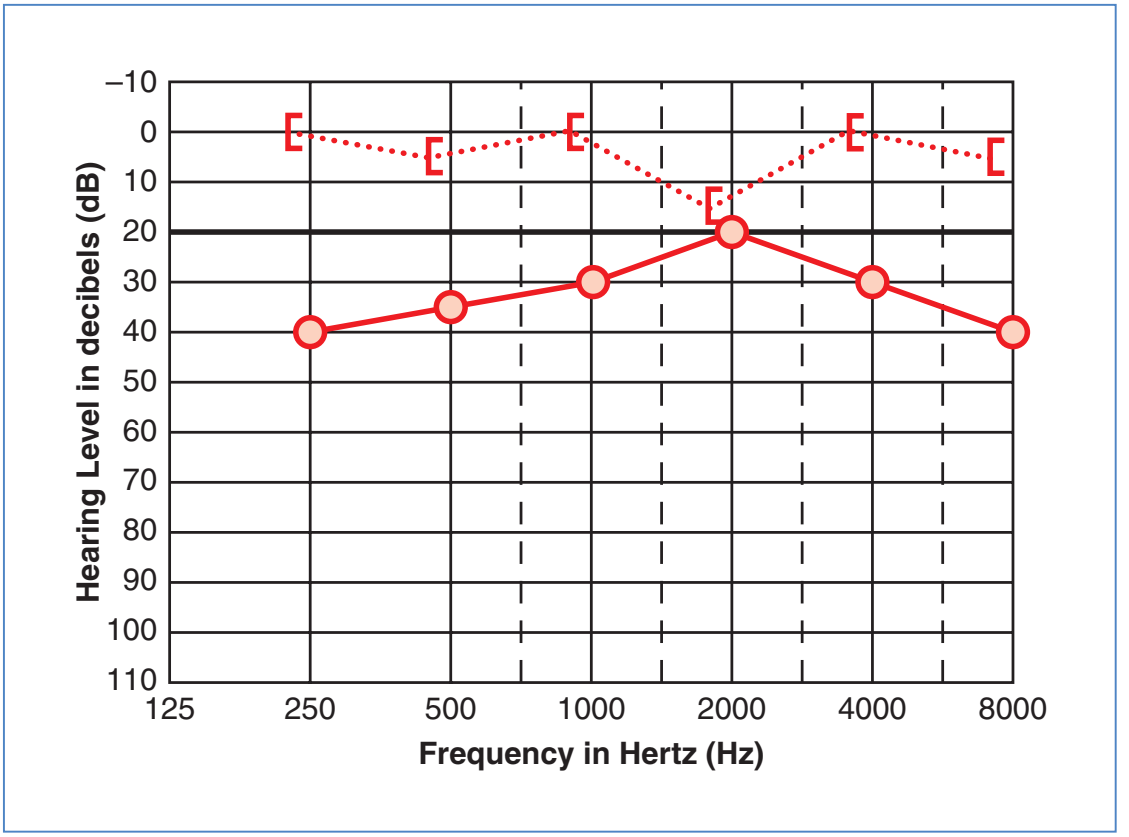


FIGURE 5.6 Otosclerosis Carhart's notch (right ear).

Evaluation and Management of Middle Ear Conditions

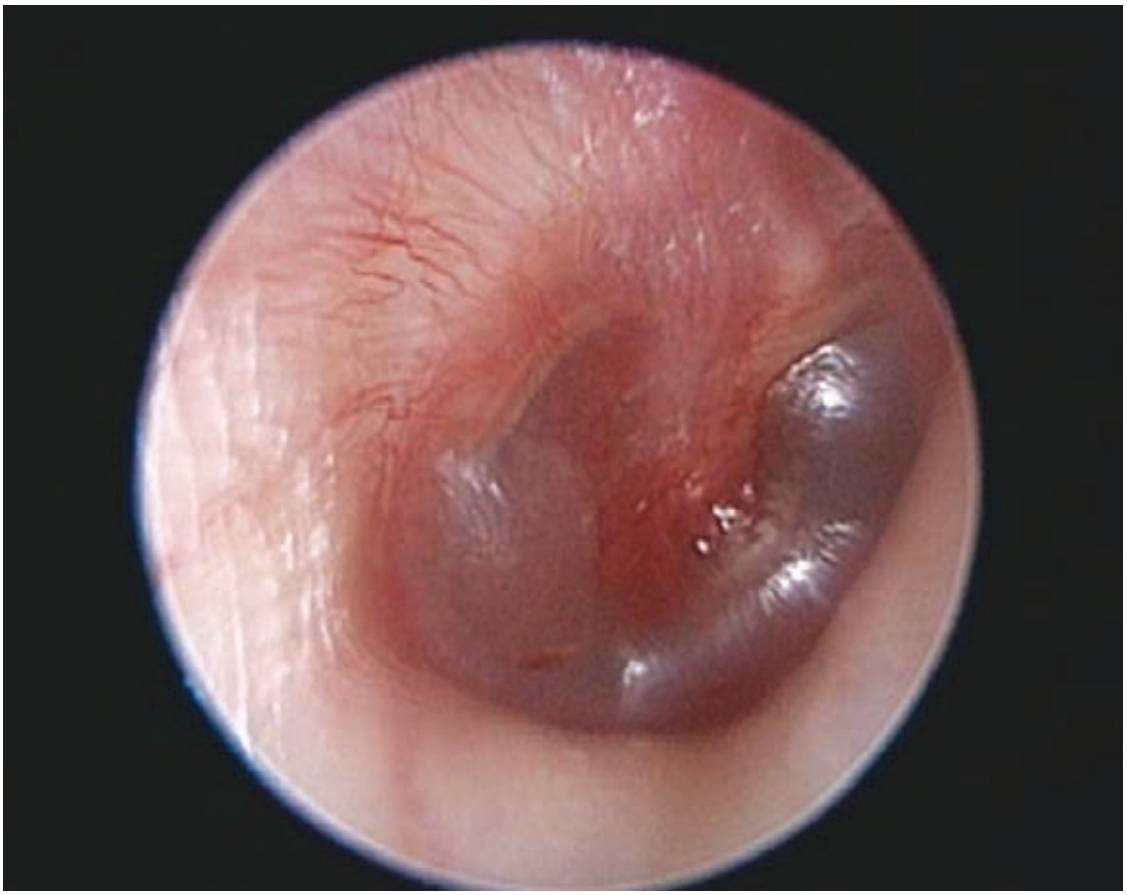


FIGURE 7.1 Bulging tympanic membrane as seen with otitis media.

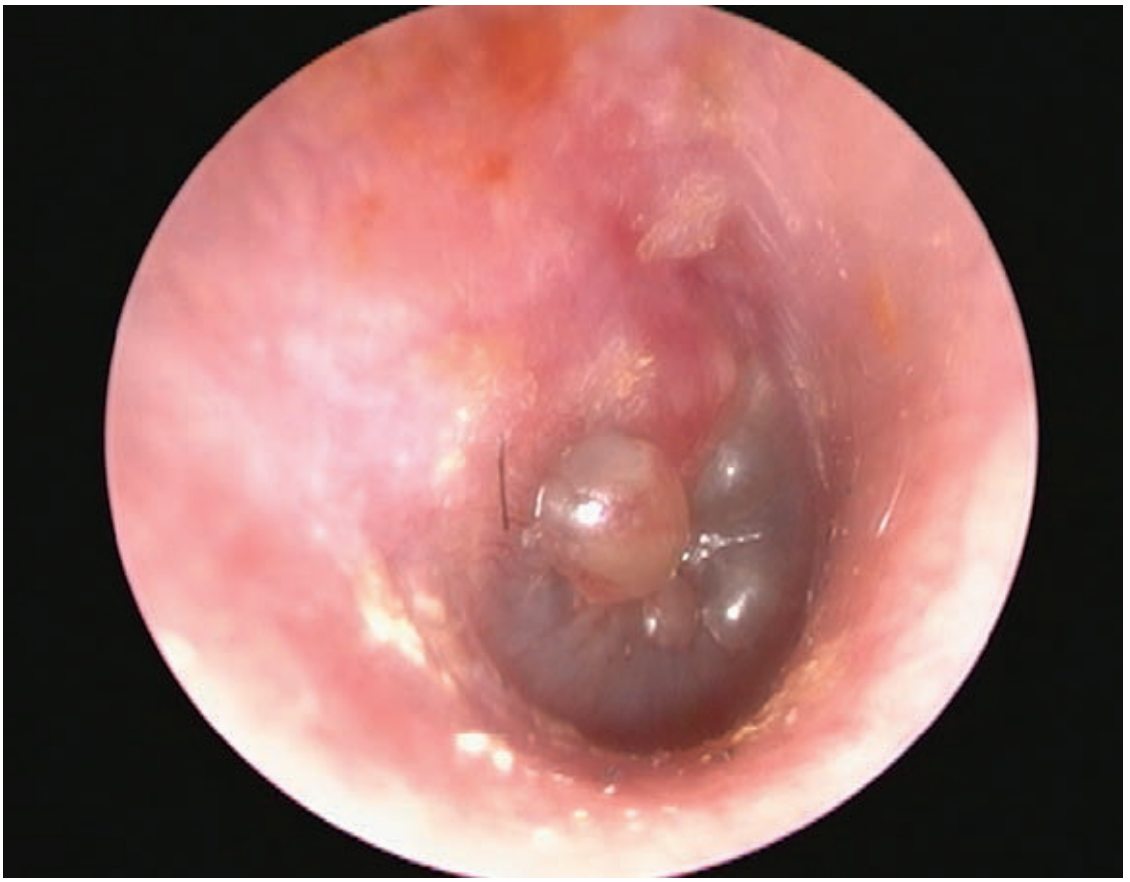


FIGURE 7.2 Bullous myringitis.

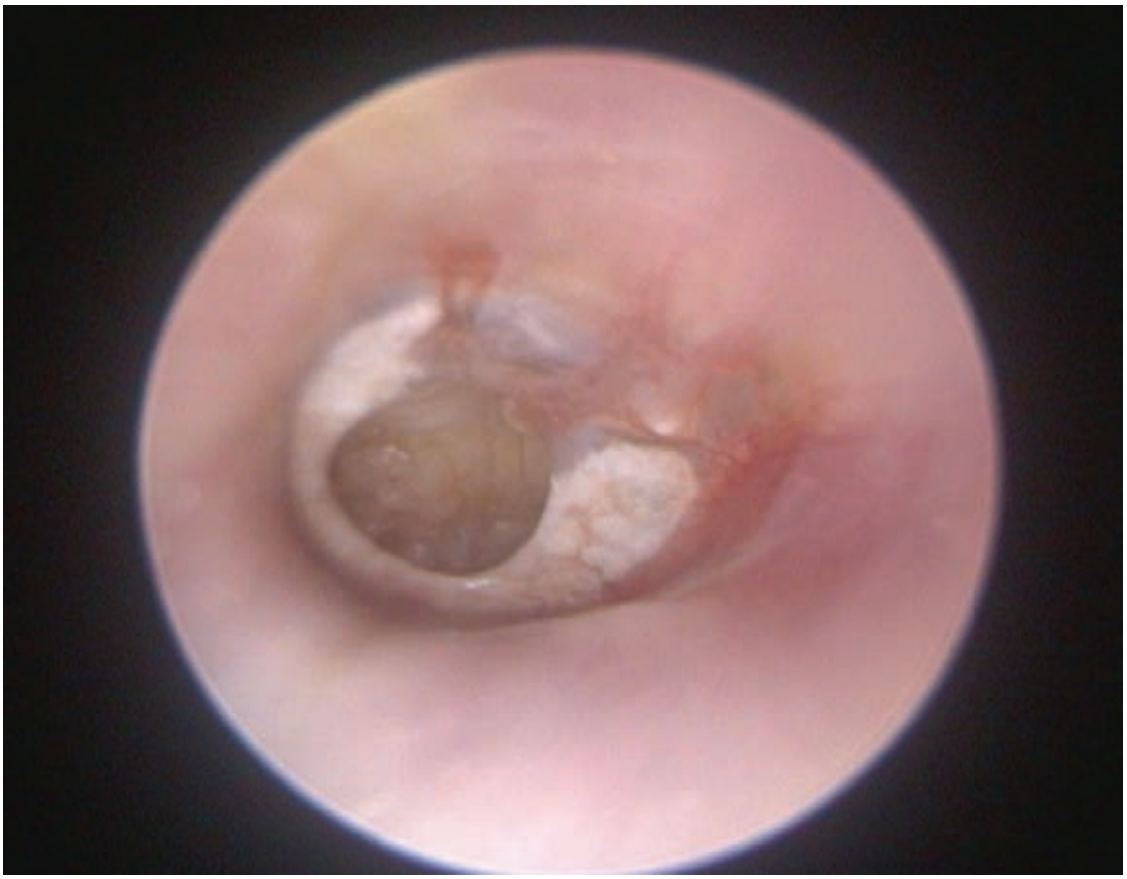


FIGURE 7.3 Tympanic membrane perforation (large) with tympanic membrane scarring (left ear).

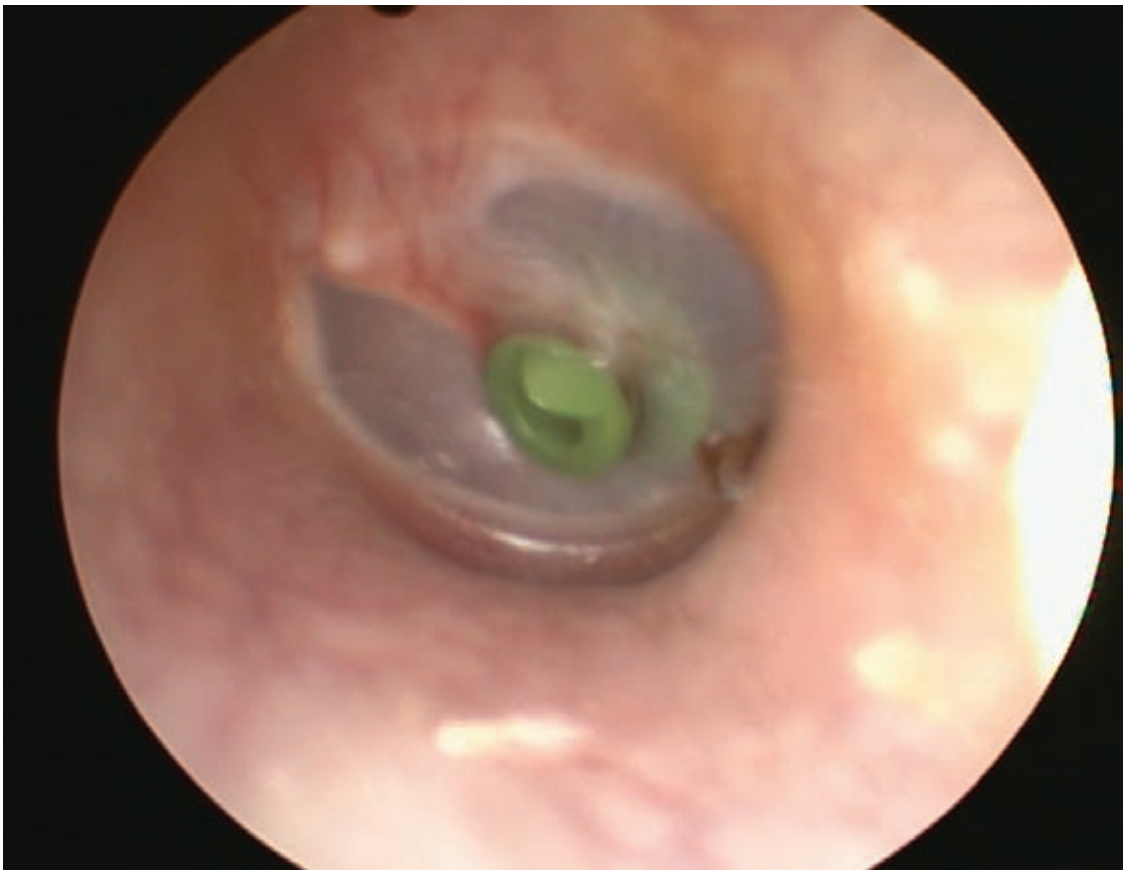


FIGURE 7.4 Normal tympanostomy tube (Armstrong).

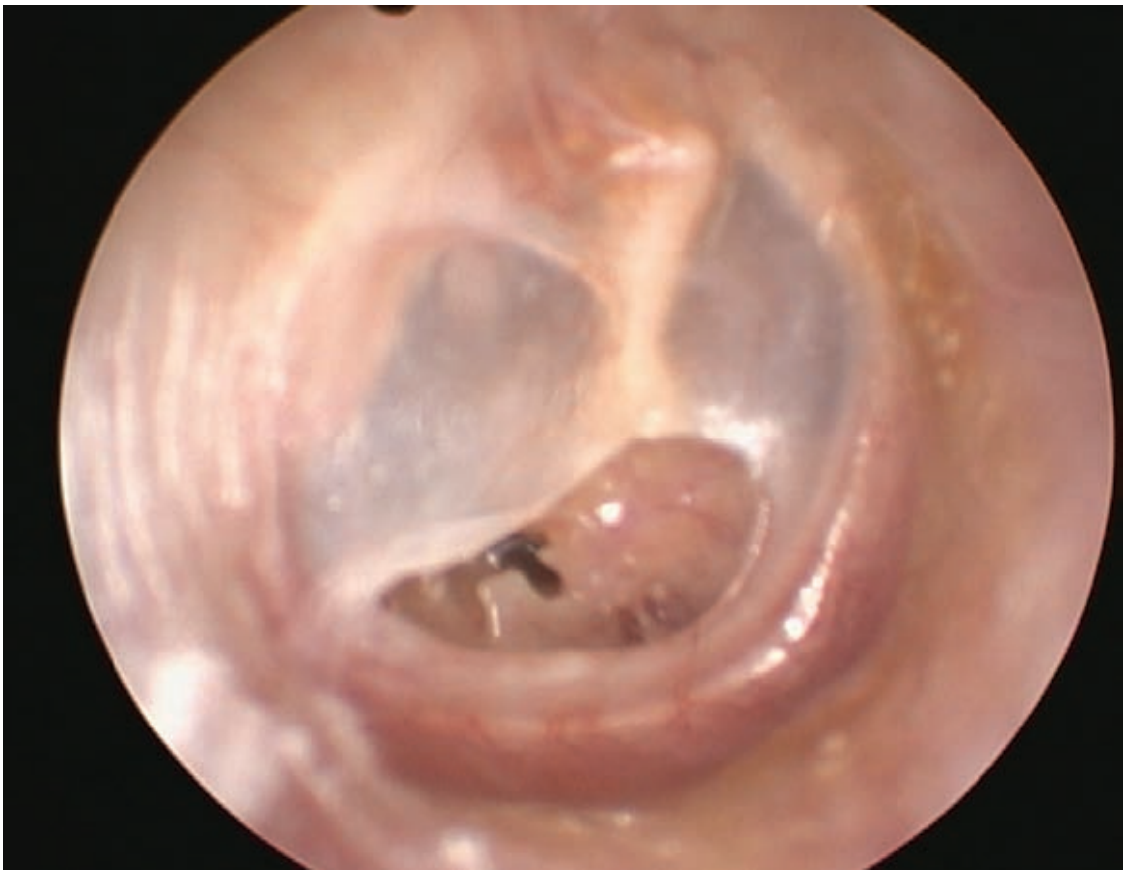


FIGURE 7.5 Large tympanic membrane perforation.

Evaluation and Management of Inner Ear Conditions

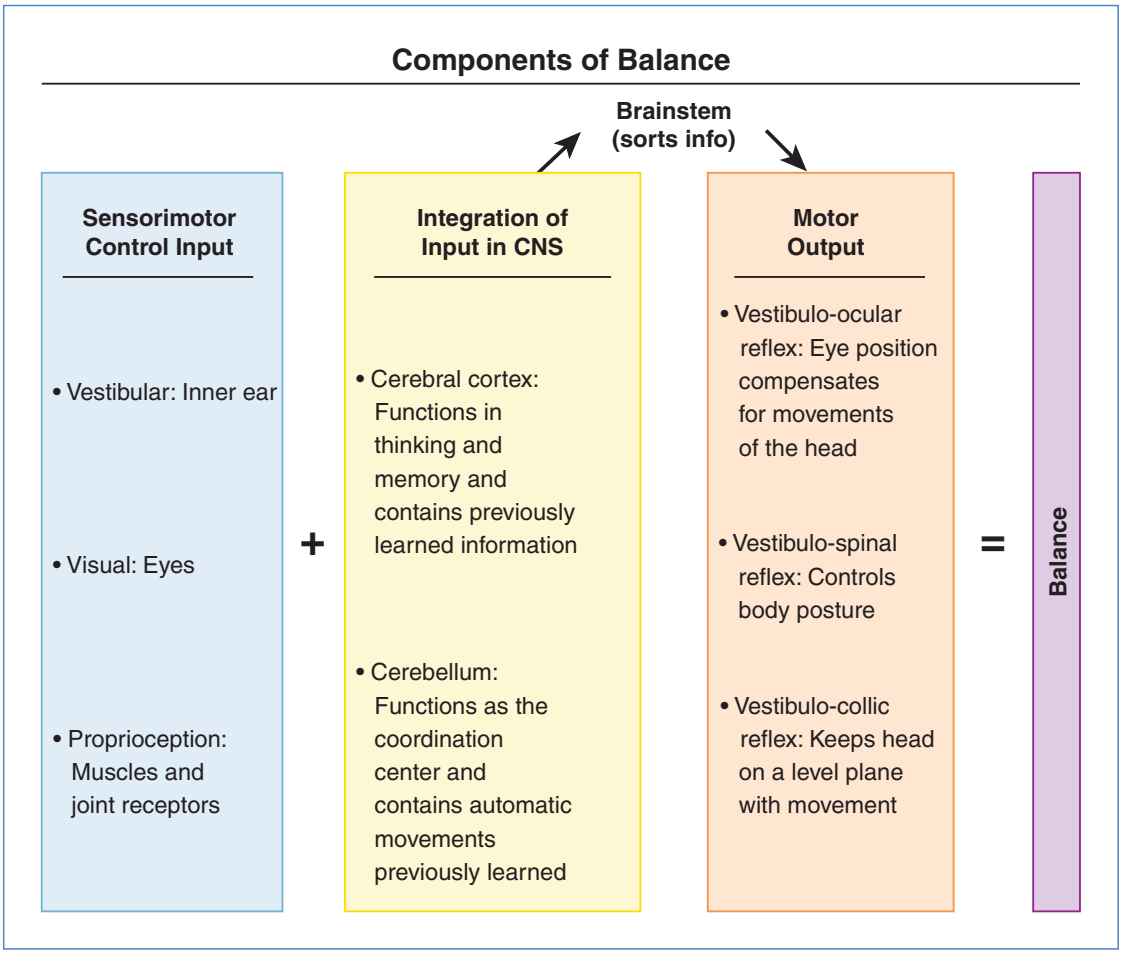


FIGURE 8.1 Components of balance.

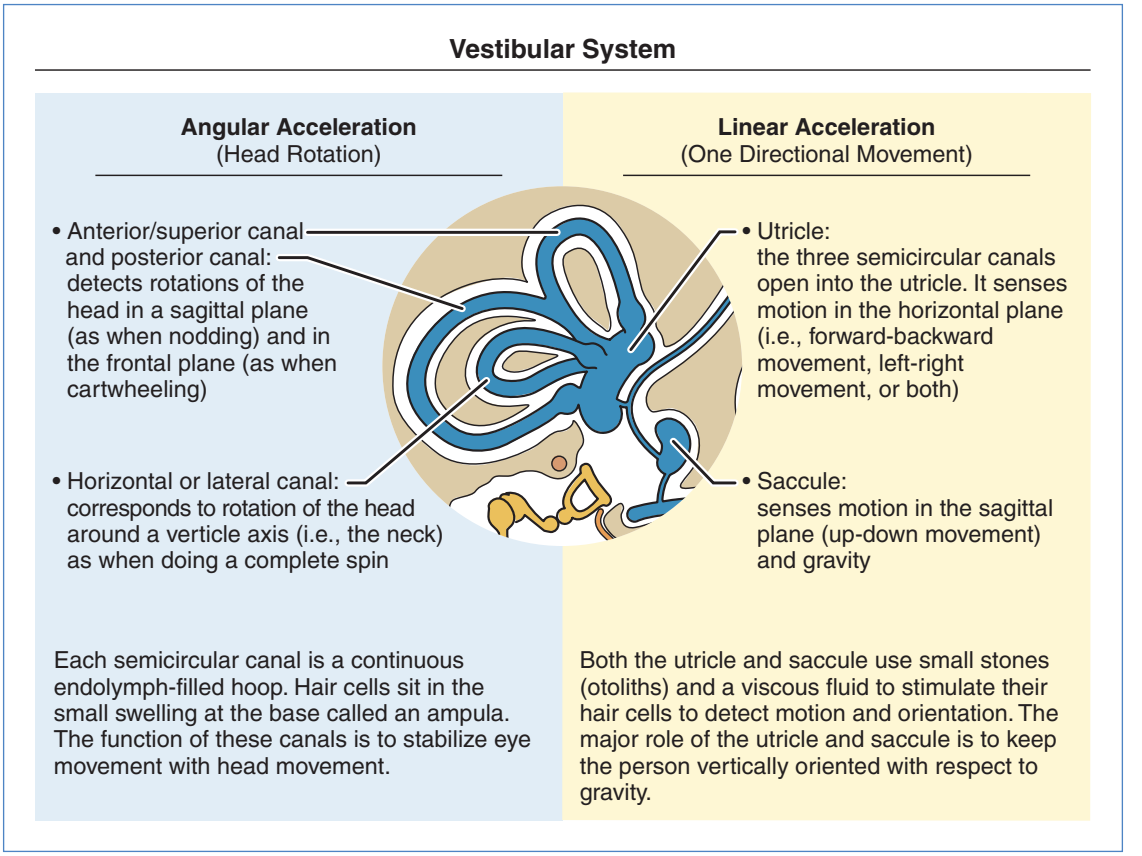


FIGURE 8.2 Vestibular system.

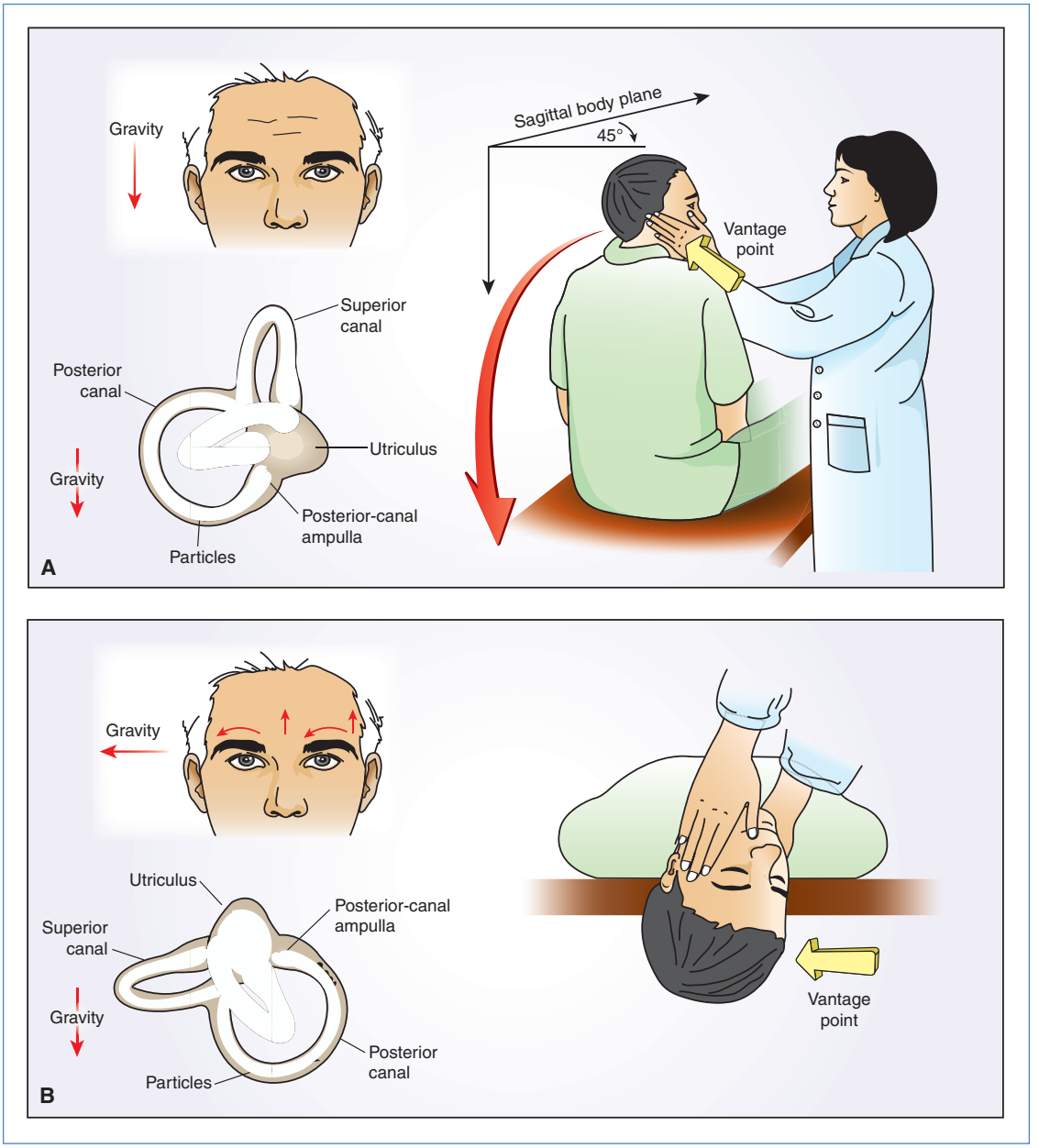


FIGURE 8.3 Dix–Hallpike maneuver.

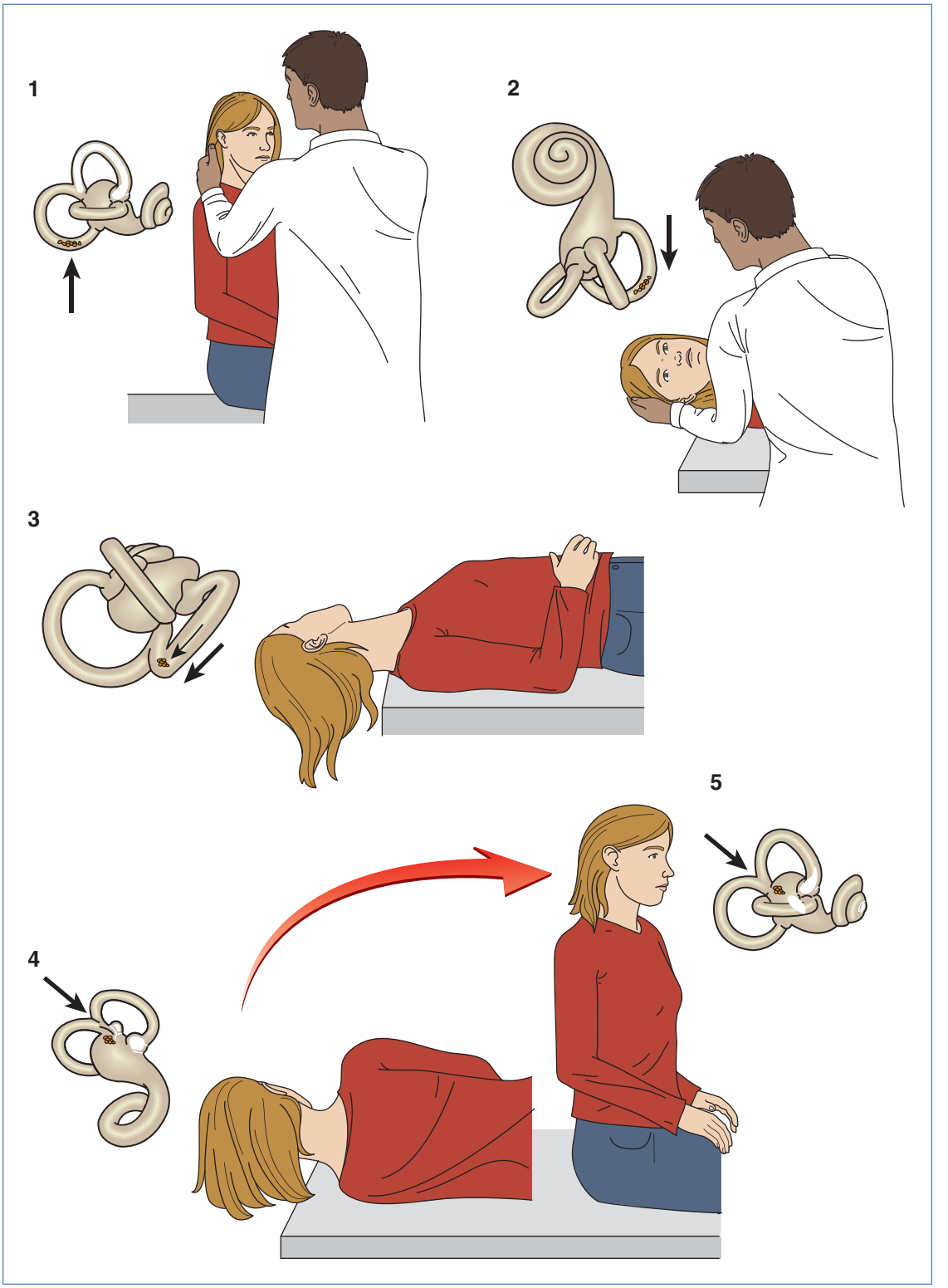


FIGURE 8.4 Epley maneuver (for right-sided posterior semicircular canal benign paroxysmal positional vertigo).

Evaluation and Management of Olfactory Disorders

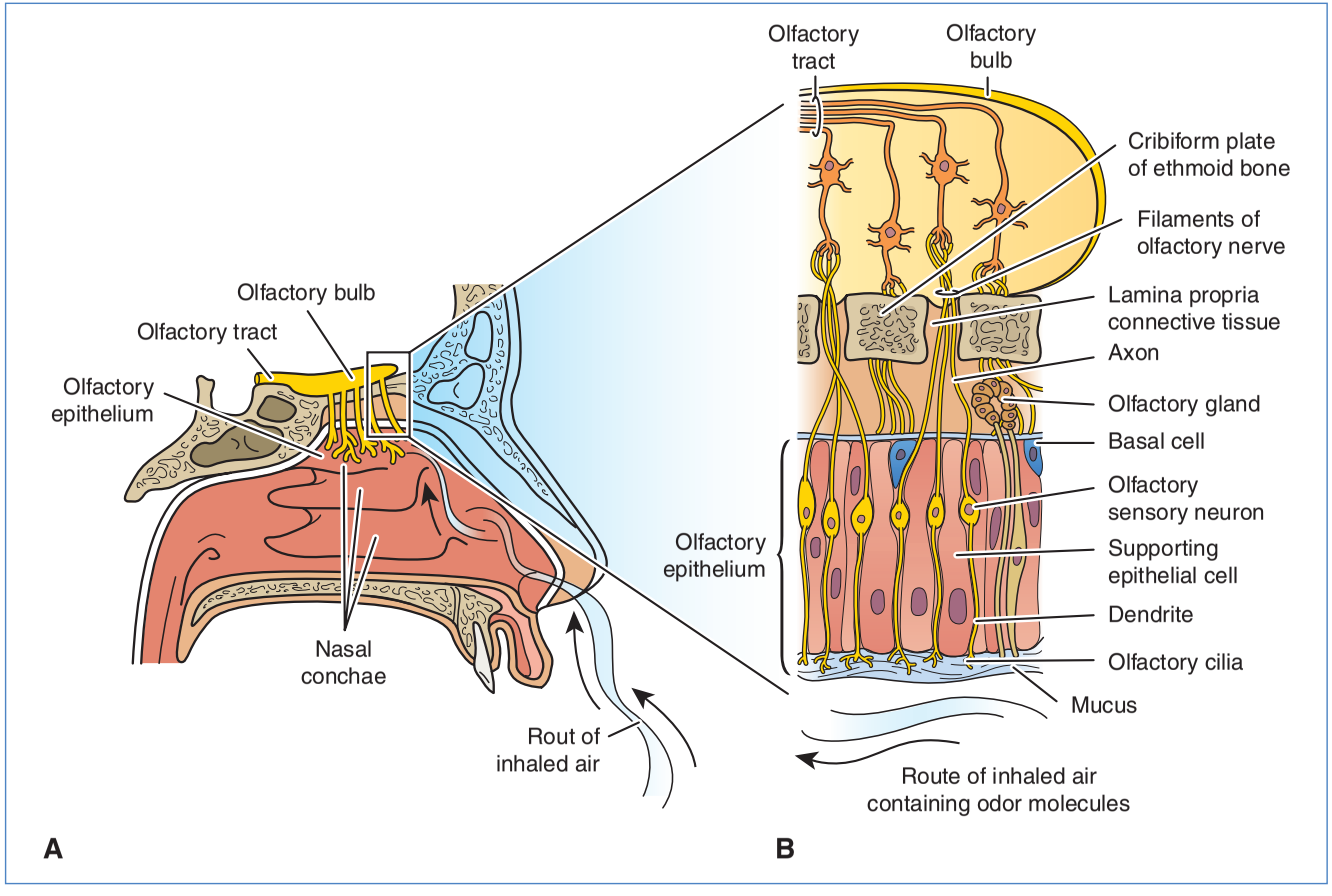
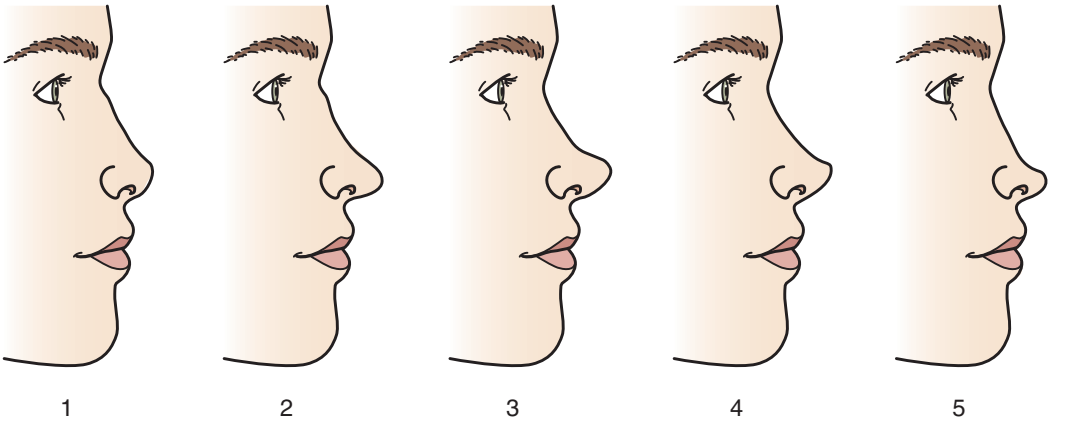


FIGURE 9.1 Olfaction.

Evaluation and Management of the Nose—External Conditions



Type	Anatomical Deficits
1	Minor supratip or nasal dorsal depression, with a normal projection of lower third of the nose
2	Depressed nasal dorsum (moderate to severe) with relatively prominent lower third
3	Depressed nasal dorsum (moderate to severe) with loss of tip support and structural deficits in the lower third of the nose
4	Catastrophic (severe) nasal dorsal loss with significant loss of the nasal structures in the lower and upper thirds of the nose

FIGURE 10.1 Saddle nose deformity.

Evaluation and Management of the Nasal Cavity and Paranasal Sinuses

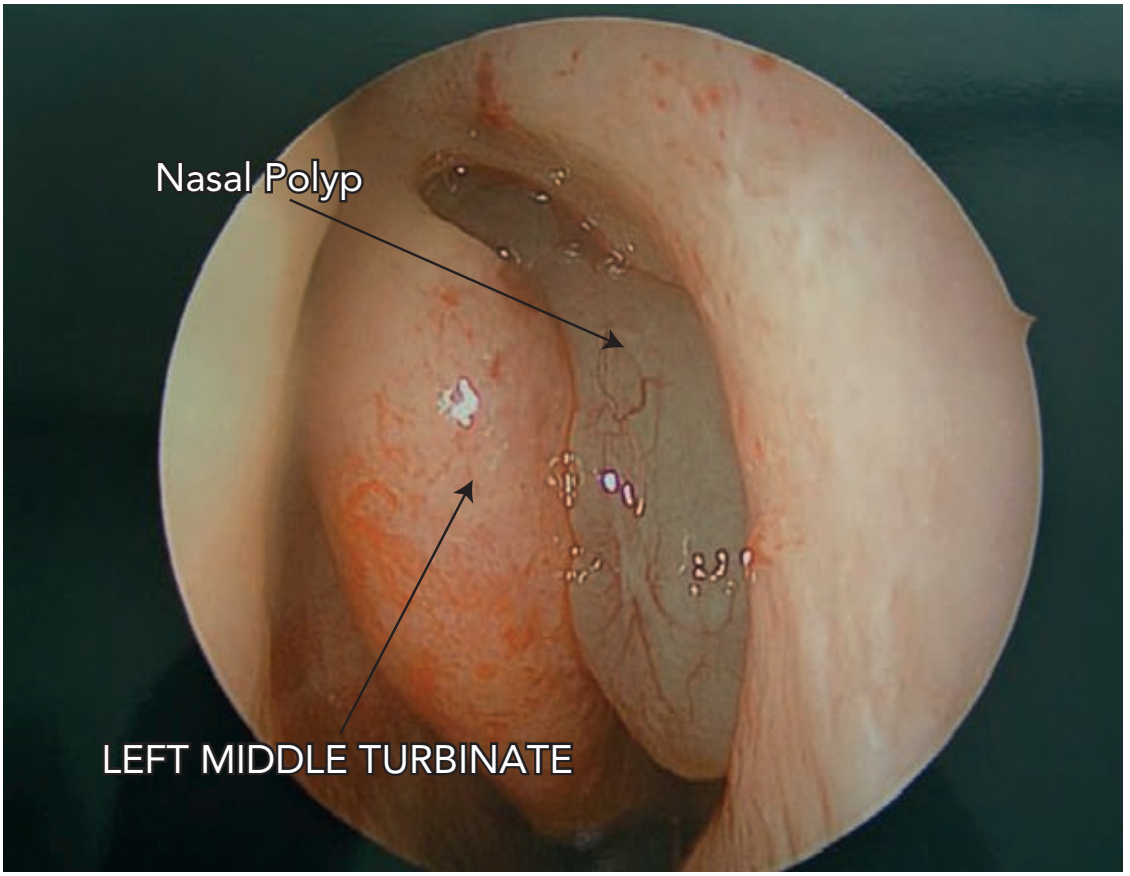


FIGURE 11.1 Nasal polyp.

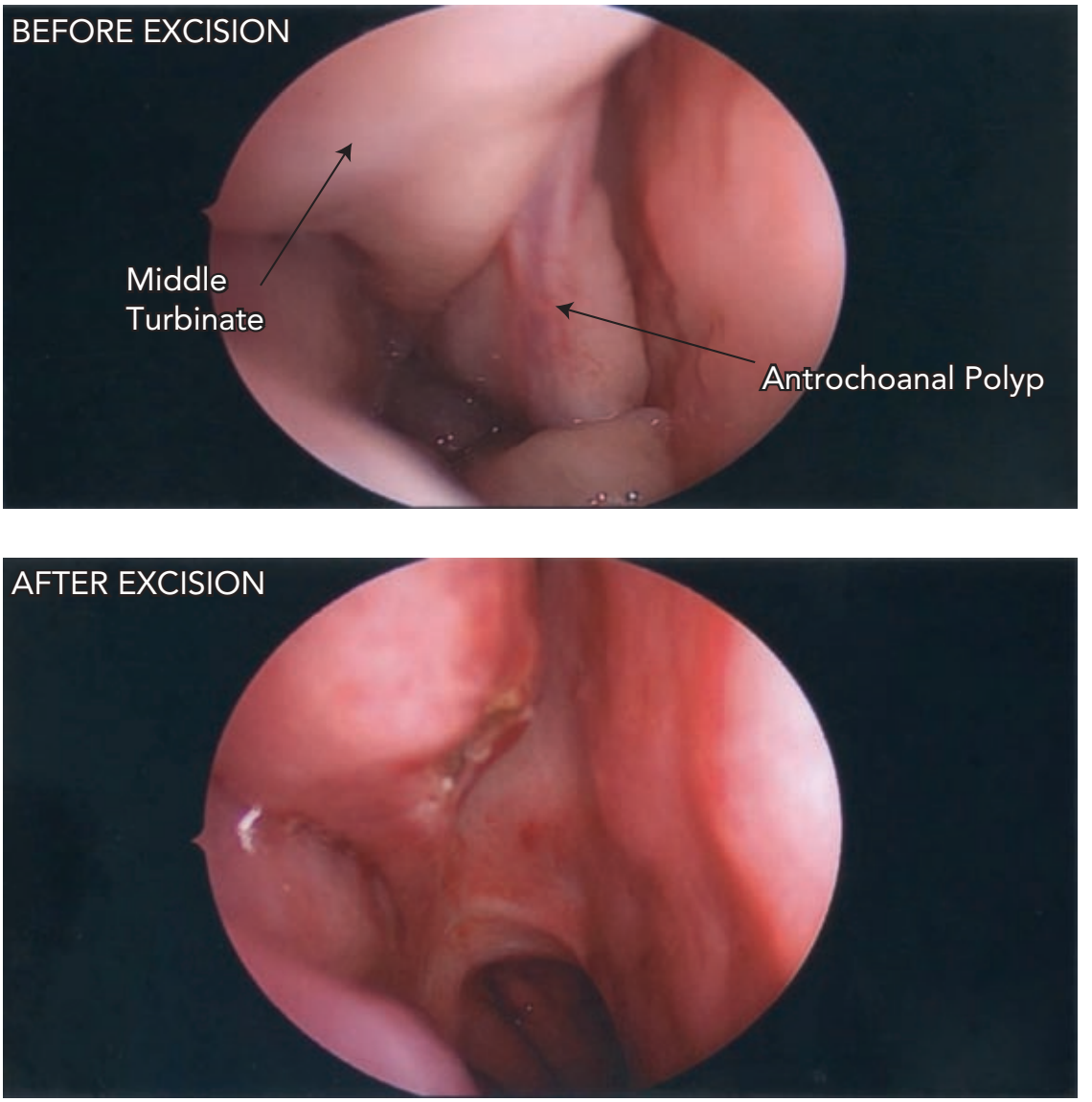


FIGURE 11.2 Antrochoanal polyp.

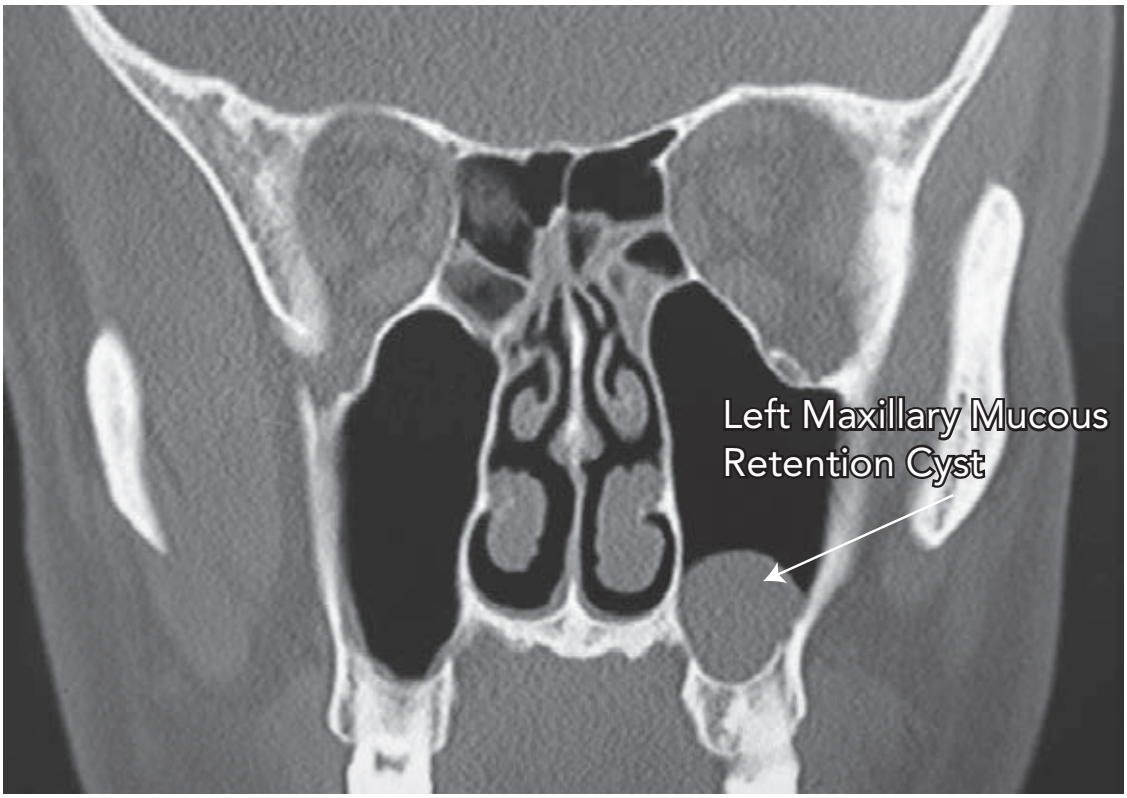


FIGURE 11.3 Mucous retention cyst.

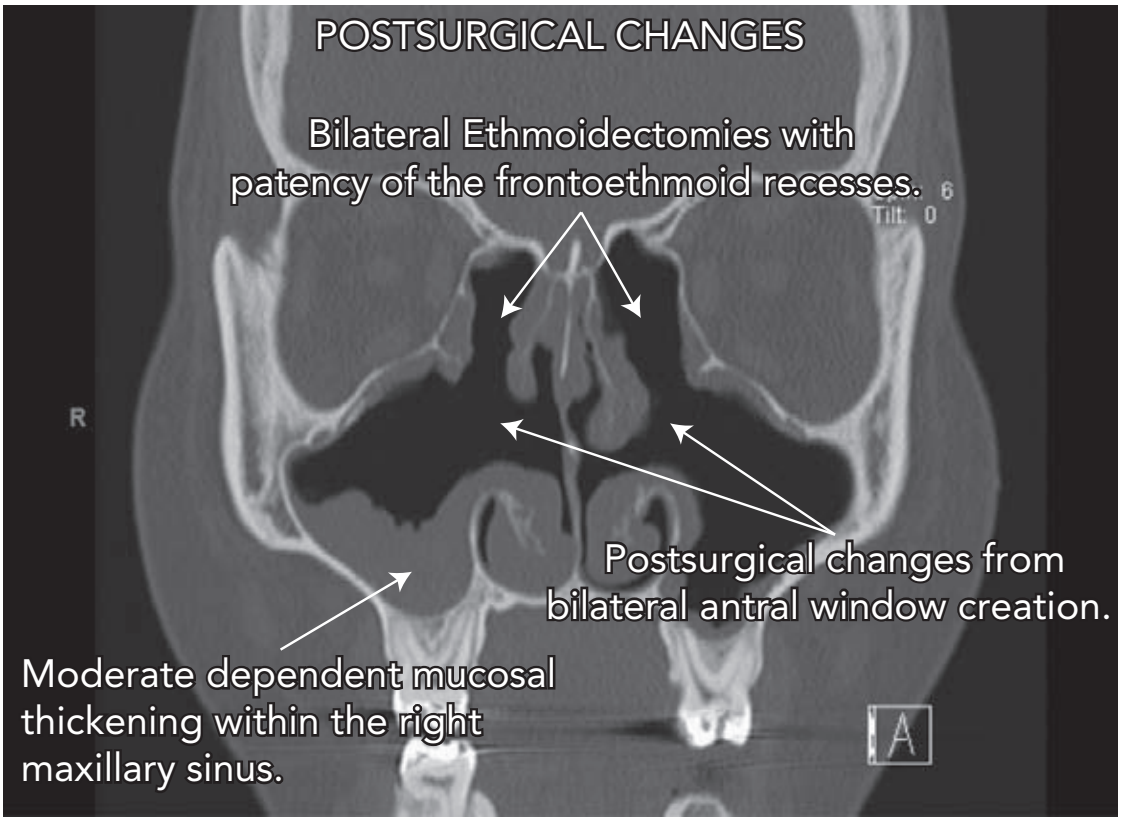


FIGURE 11.4 Postsurgical changes.

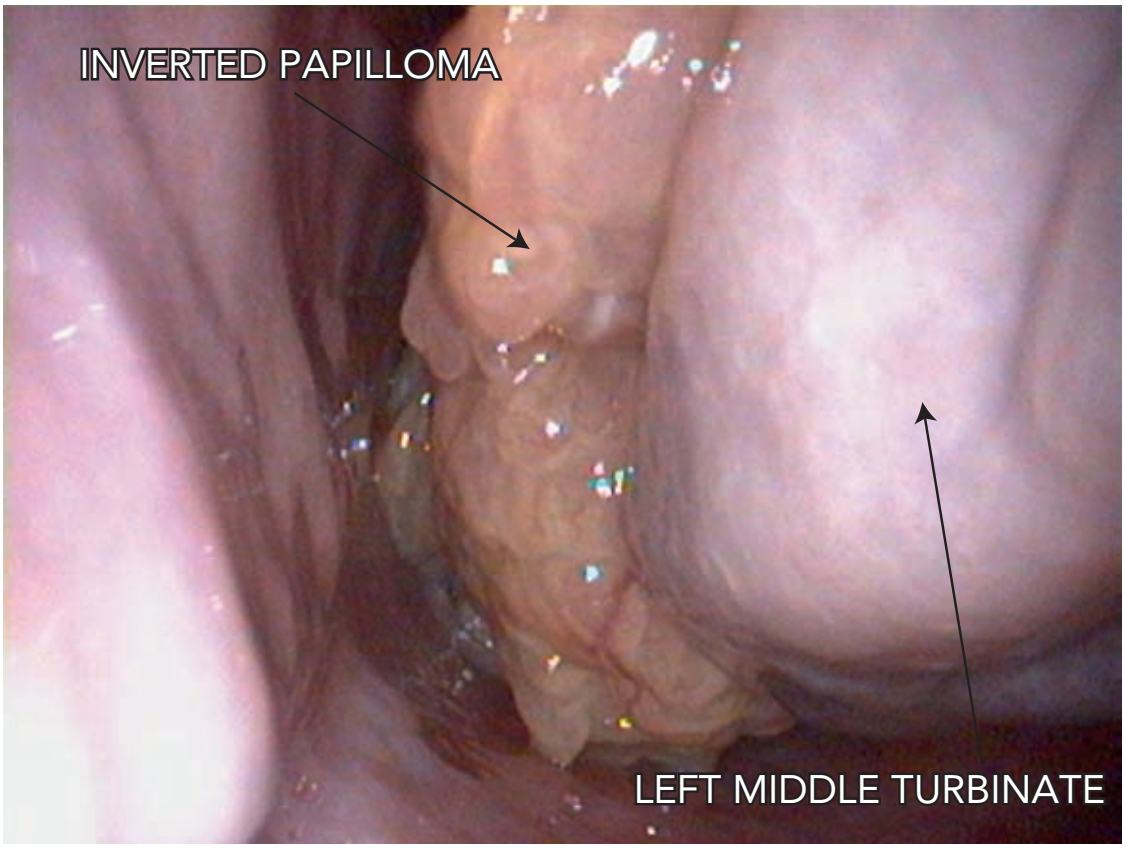


FIGURE 11.5 Inverted papilloma.

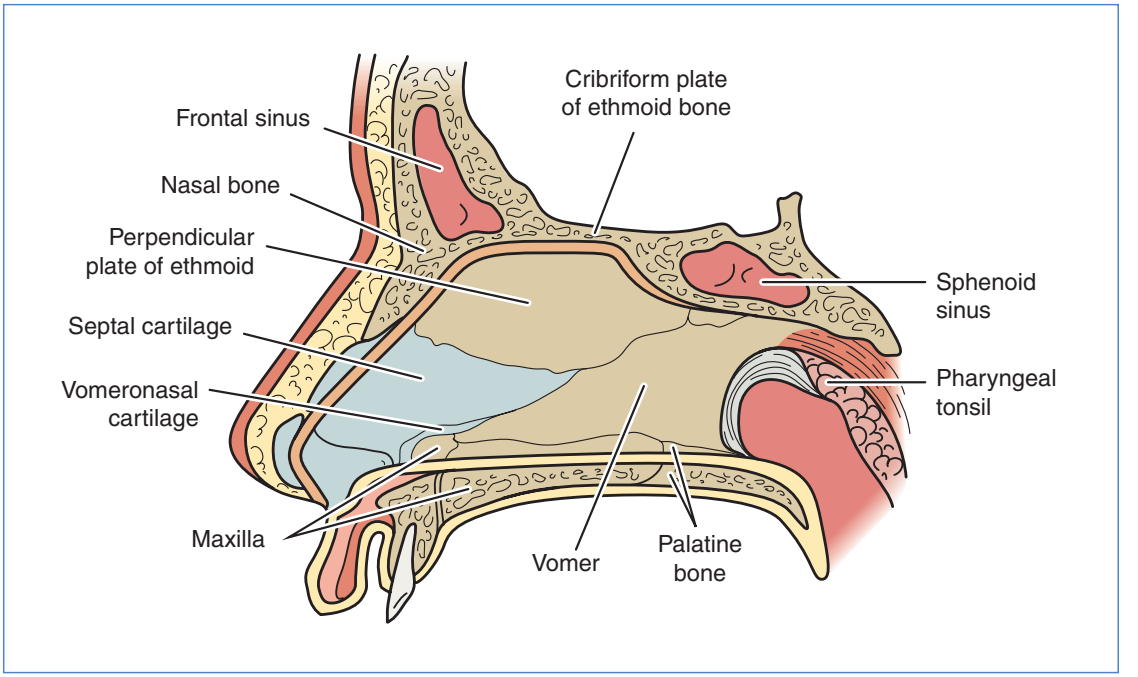


FIGURE 11.6 Nasal septum anatomy.

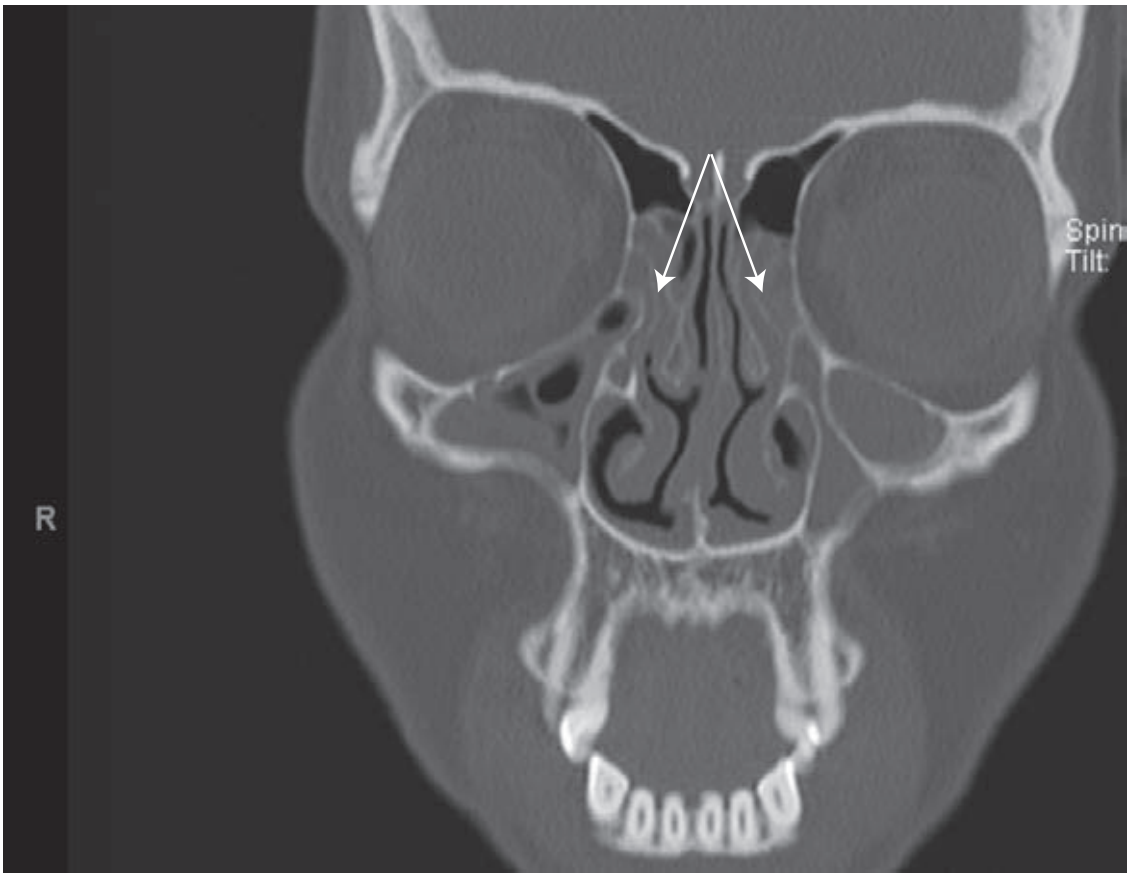


FIGURE 11.7 Obstructed osteomeatal complex bilateral. Moderate left and right maxillary and ethmoid sinus mucosal thickening. Osteomeatal complex is occluded bilaterally.

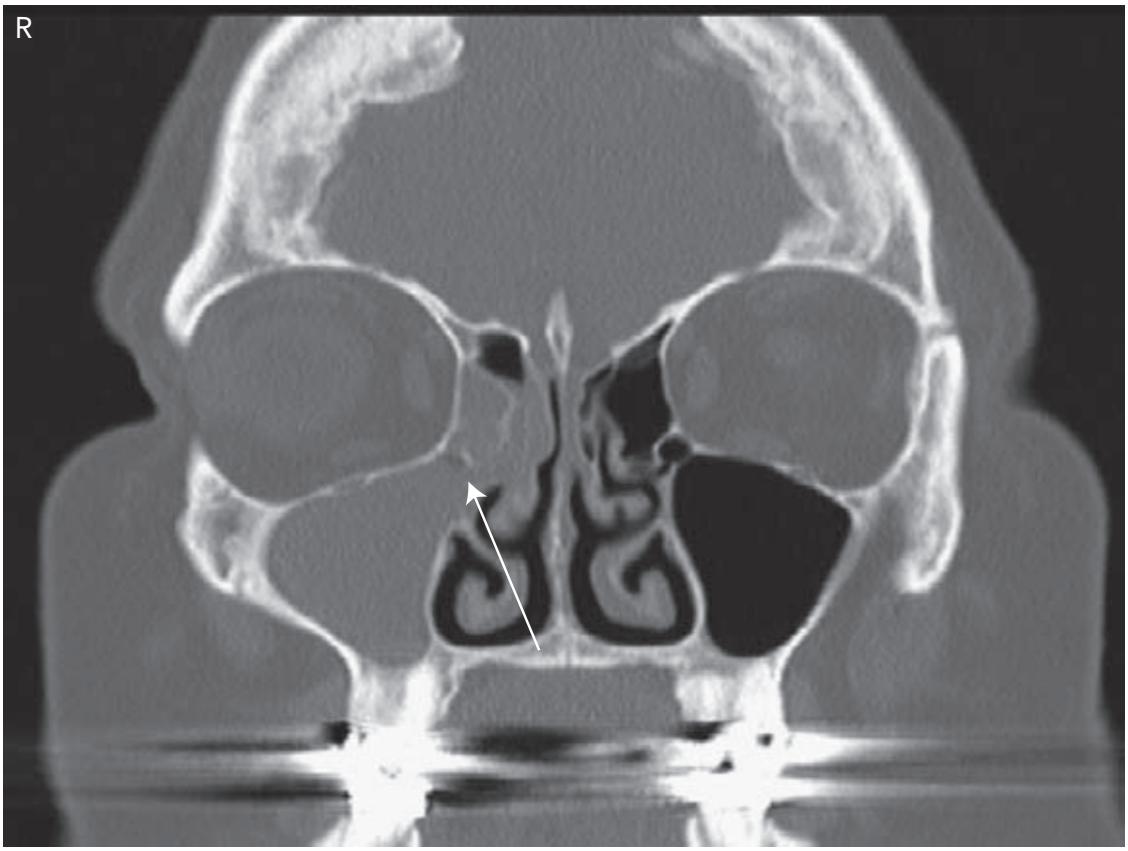


FIGURE 11.8 Obstructed osteomeatal complex unilateral. Complete opacification of the right maxillary sinus. Near-complete opacification of the anterior ethmoid air cells. Right osteomeatal complex is opacified. There is also occlusion of the right frontoethmoid recess.

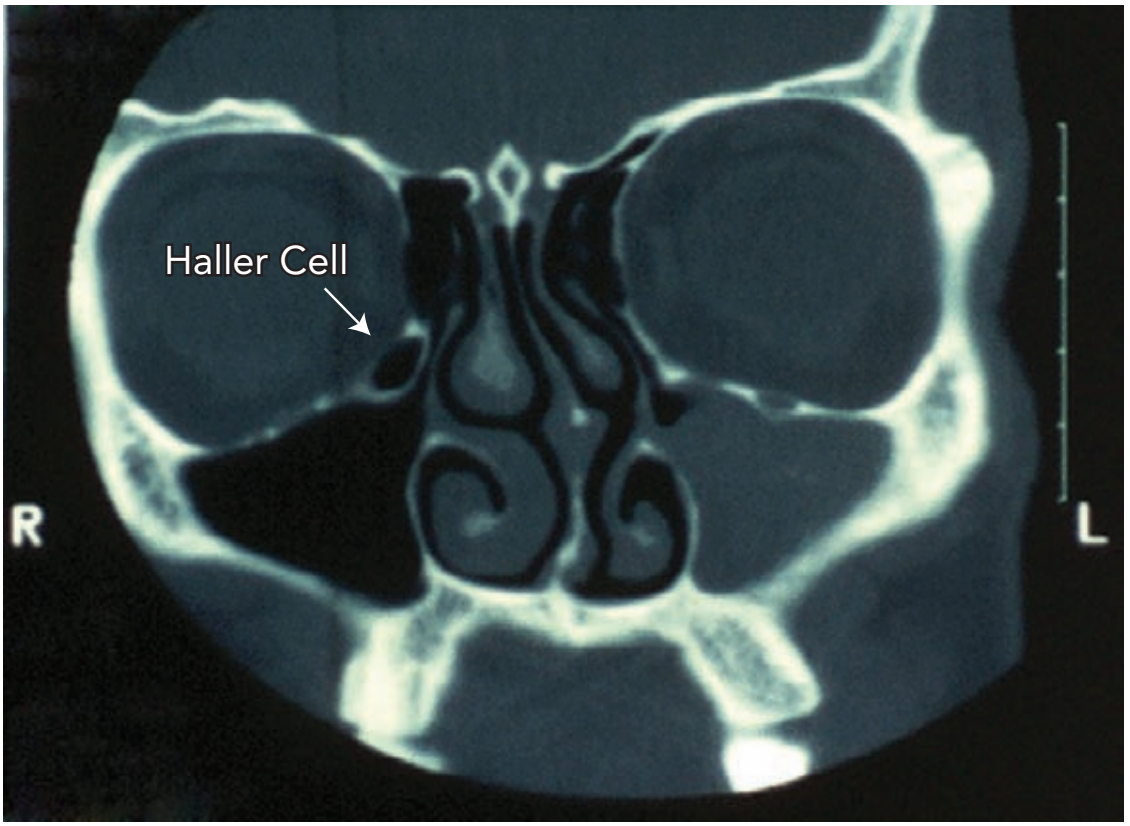


FIGURE 11.9 Haller cell.

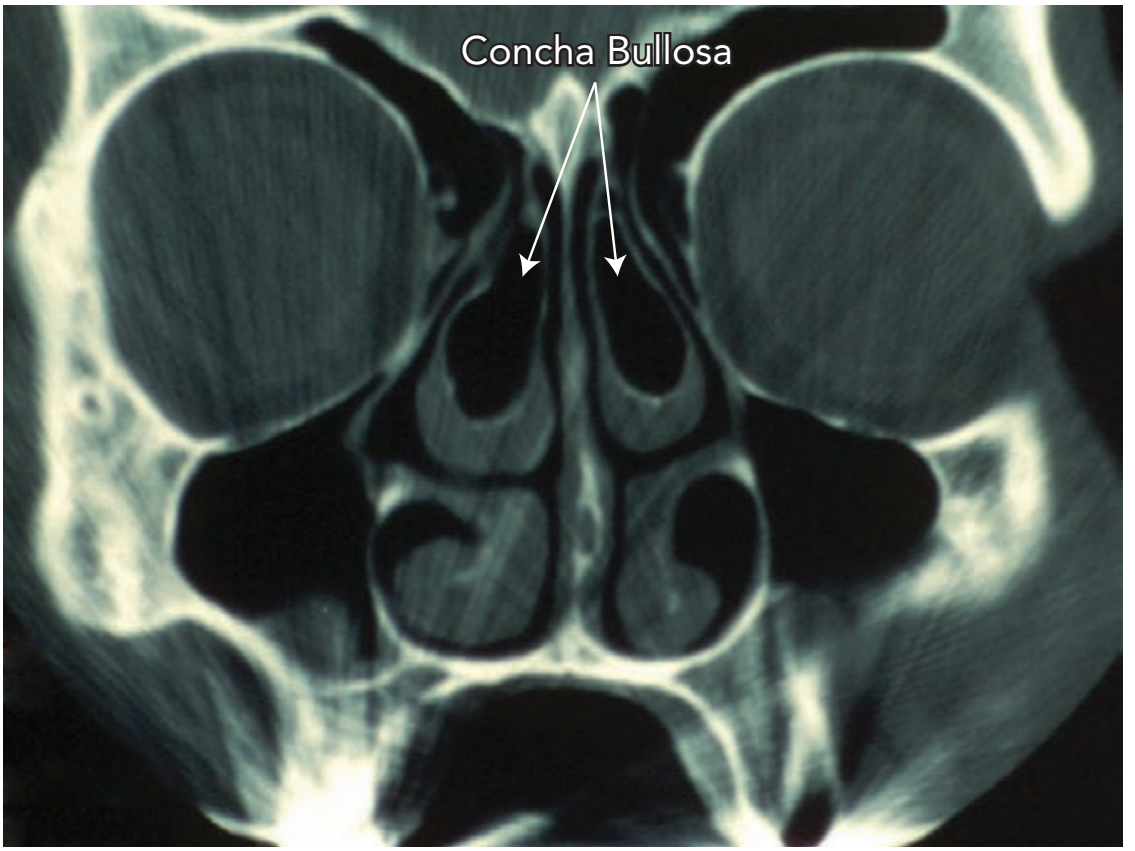


FIGURE 11.10 Concha bullosa.

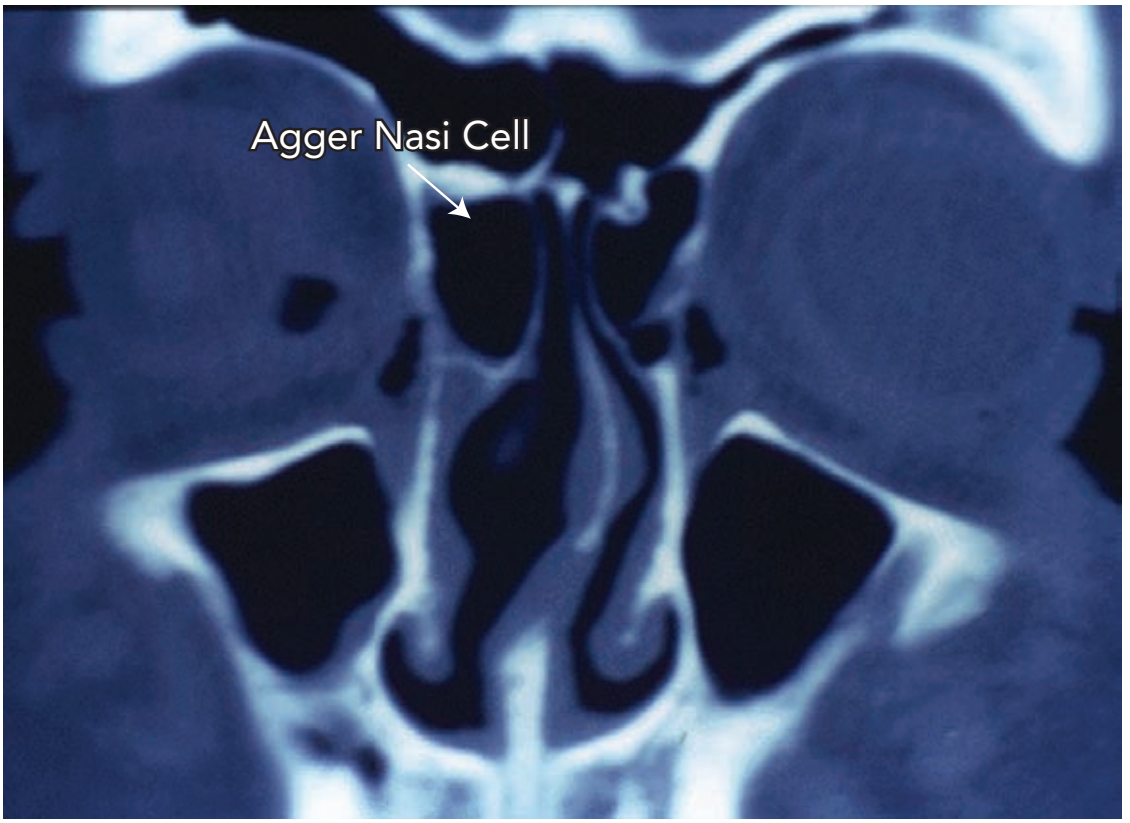


FIGURE 11.11 Agger nasi cell.

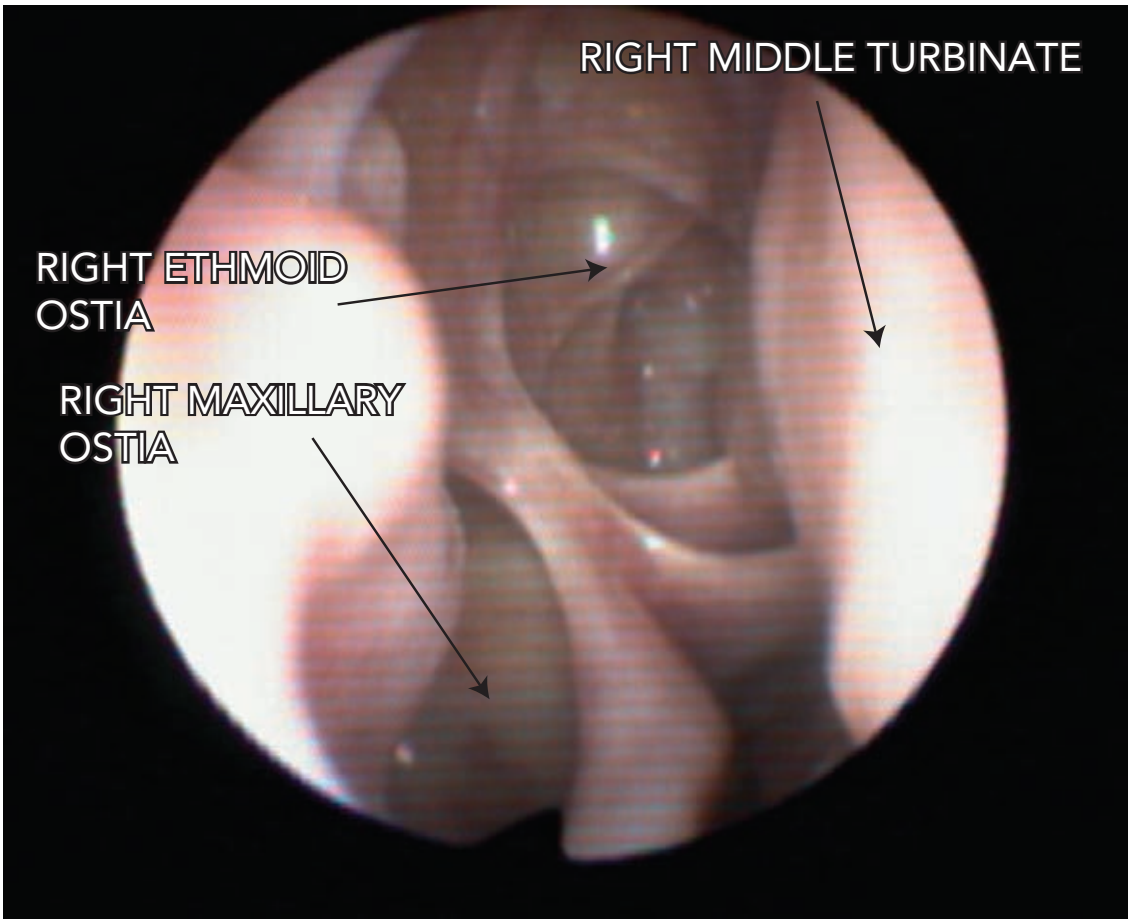


FIGURE 11.12 Sinus ostia after endoscopic sinus surgery. View of the right ethmoid and maxillary ostia.

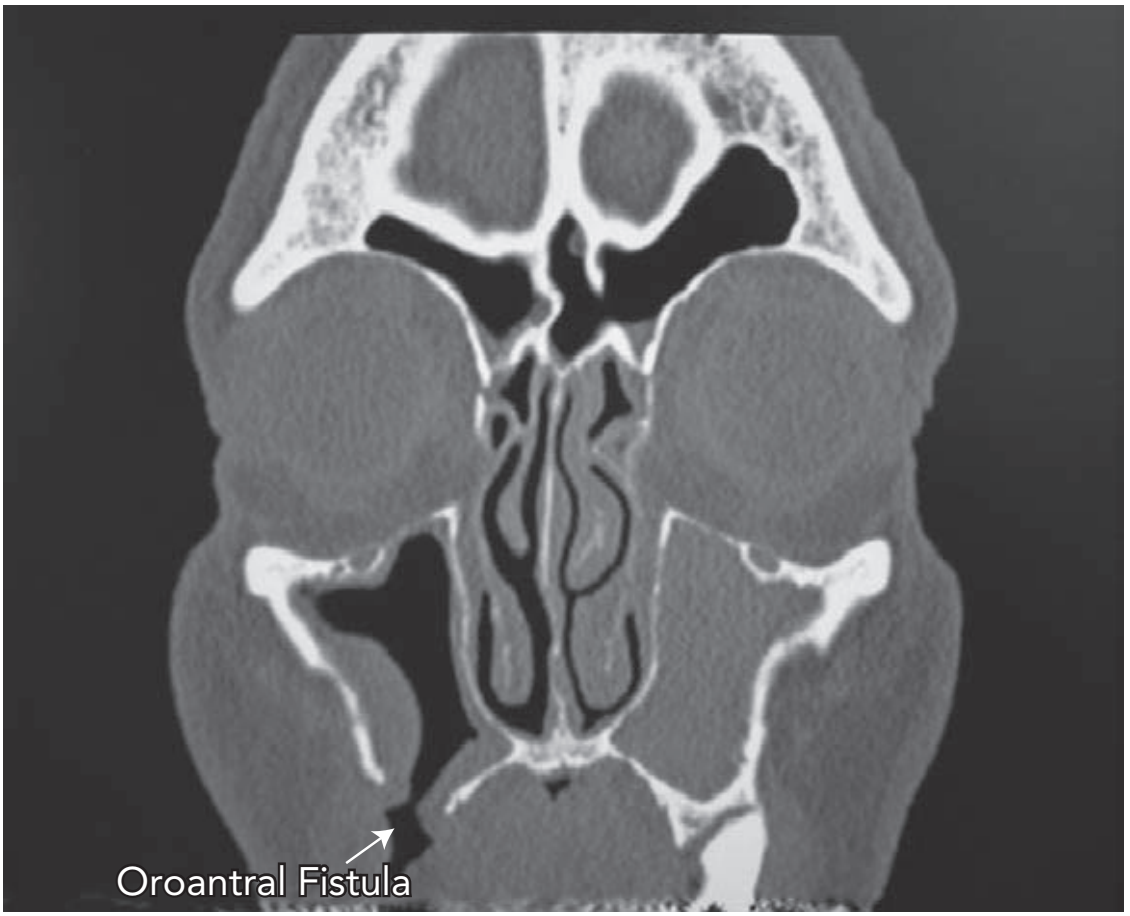


FIGURE 11.13 Oroantral fistula.

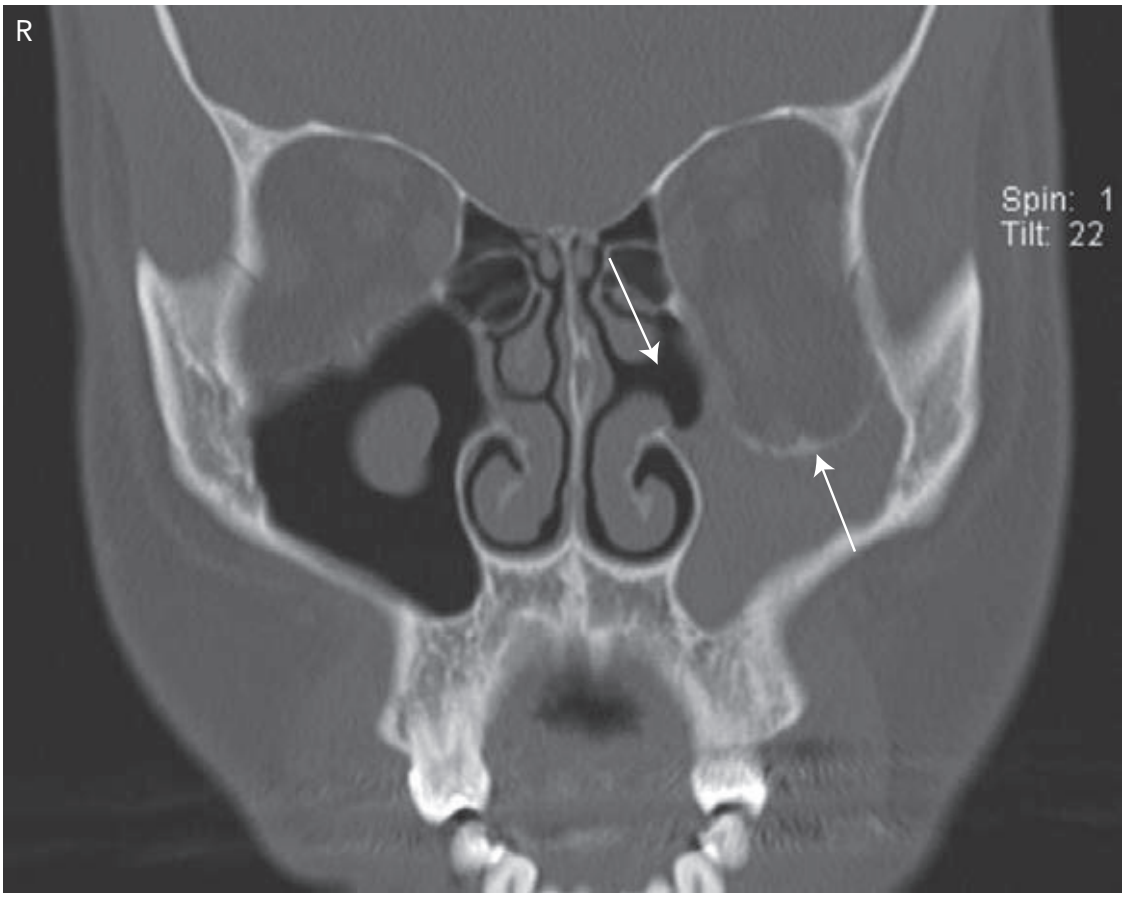


FIGURE 11.14 Silent sinus syndrome. Scan shows marked reduction in left maxillary sinus volume. There is inferior bowing of the orbital floor with increased left orbital volume and enophthalmos with an absence of the left maxillary ostium (compared to the right) and complete opacification of the left maxillary sinus with occlusion of the left osteomeatal complex (OMC). These findings are compatible with silent sinus syndrome. Incidental note: There is a mucus retention cyst versus a polyp in the right maxillary sinus. The right OMC is patent.

Evaluation and Management of Nasopharynx Conditions

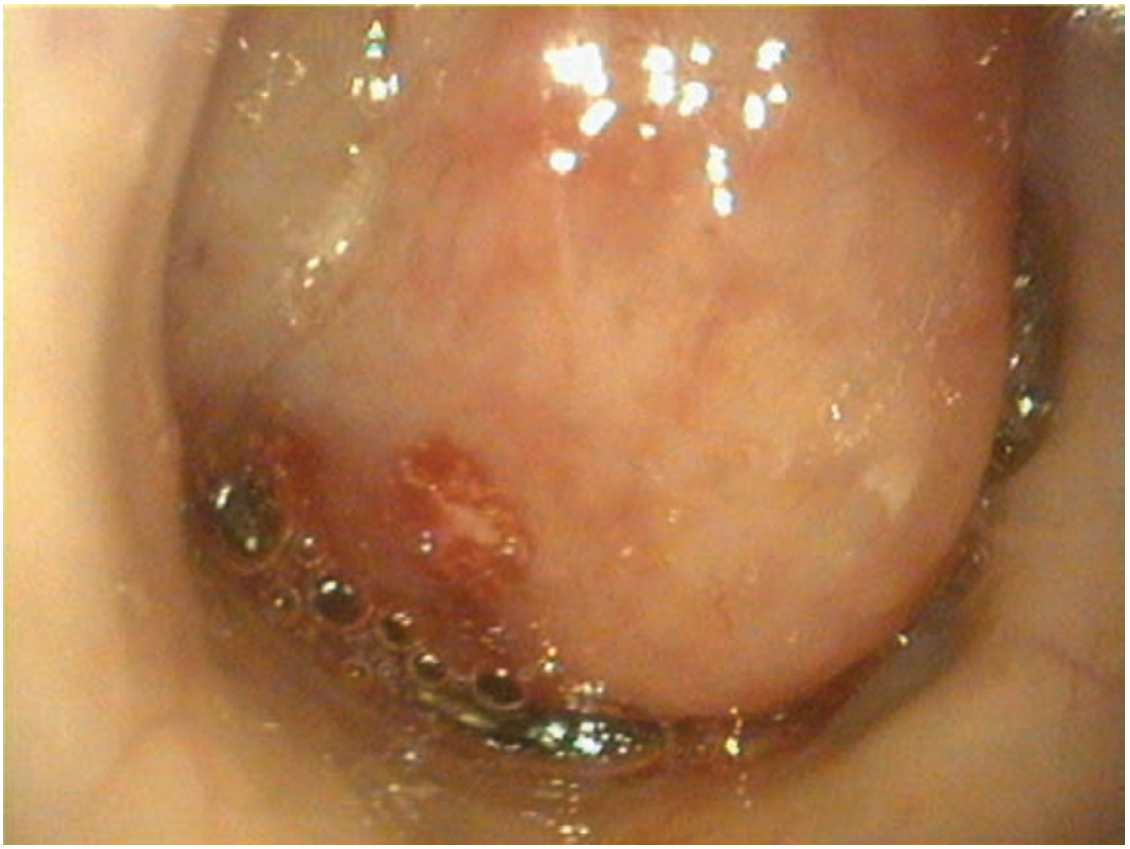


FIGURE 12.1 Adenoid hypertrophy blocking the posterior nasopharynx on nasal endoscopic examination.

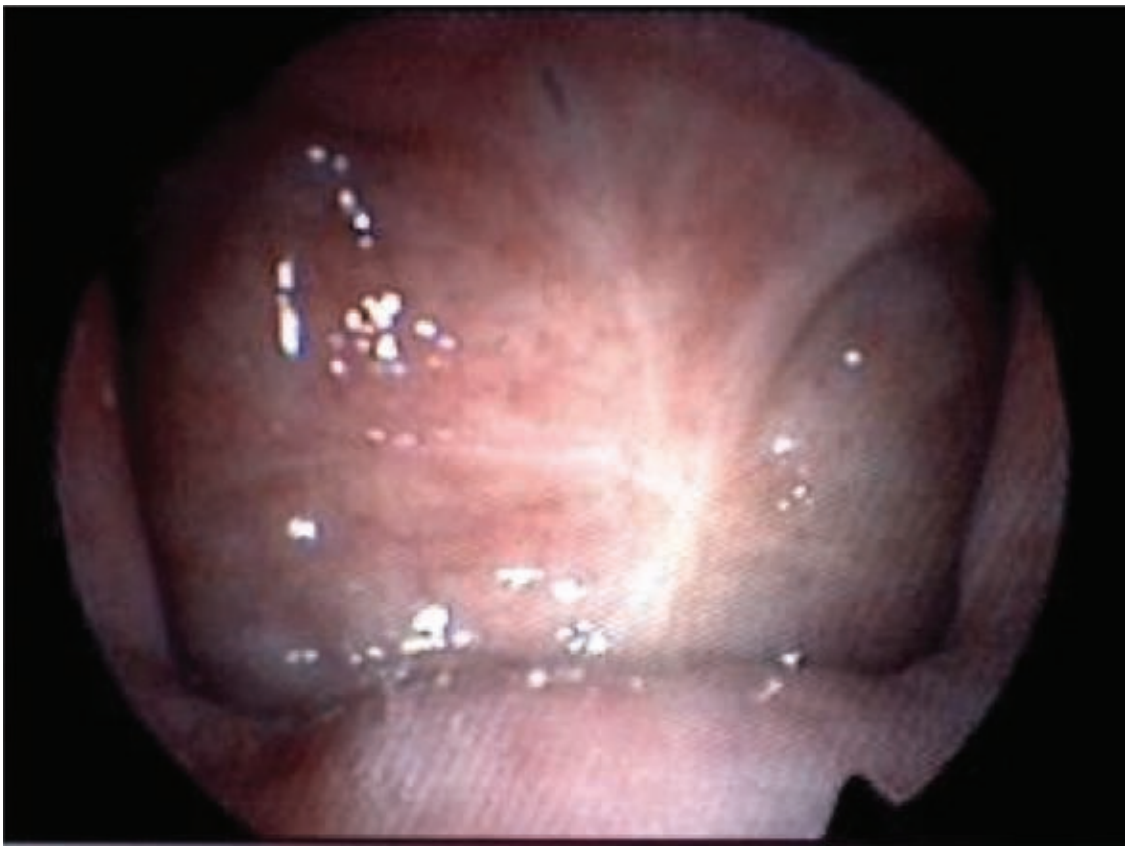


FIGURE 12.2 Postop adenoidectomy scar as seen on nasopharyngoscopy examination.

Evaluation and Management of Oropharynx Disorders

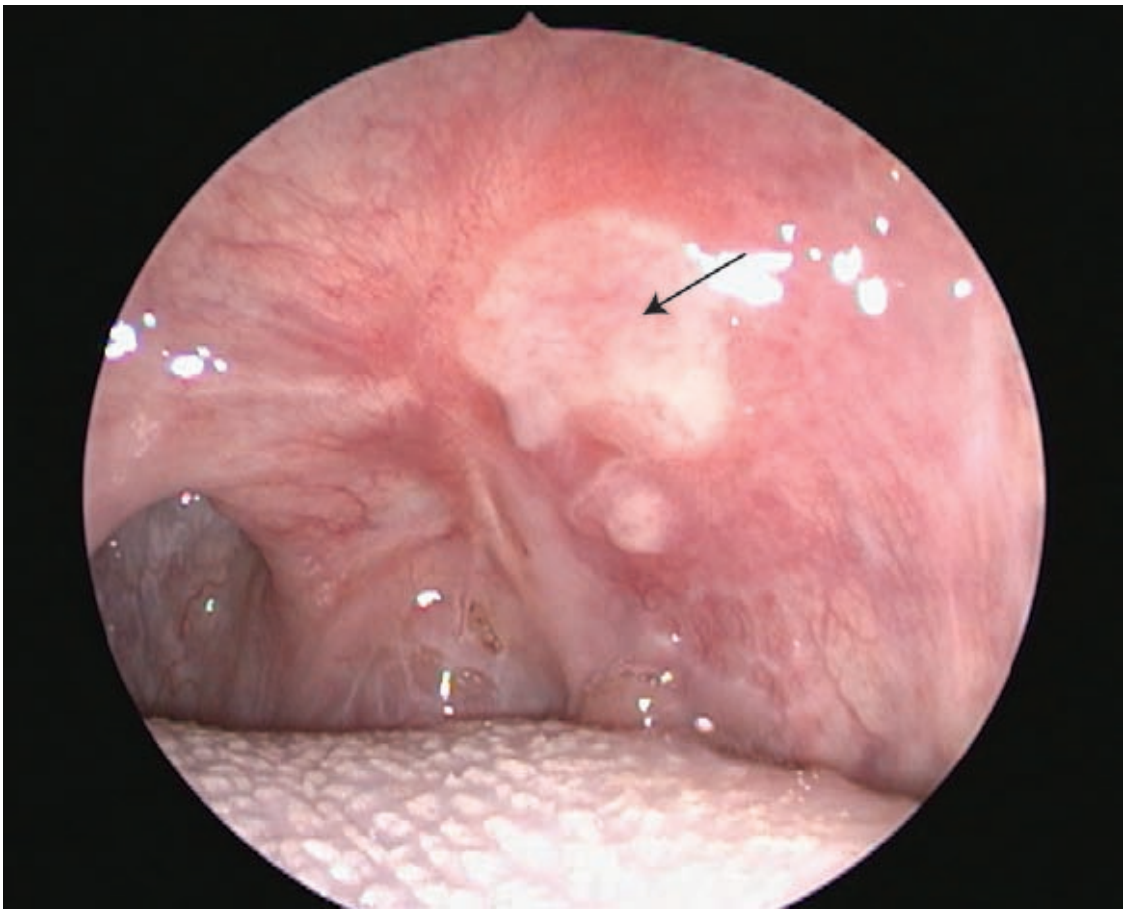


FIGURE 13.1 Aphthous ulcer.

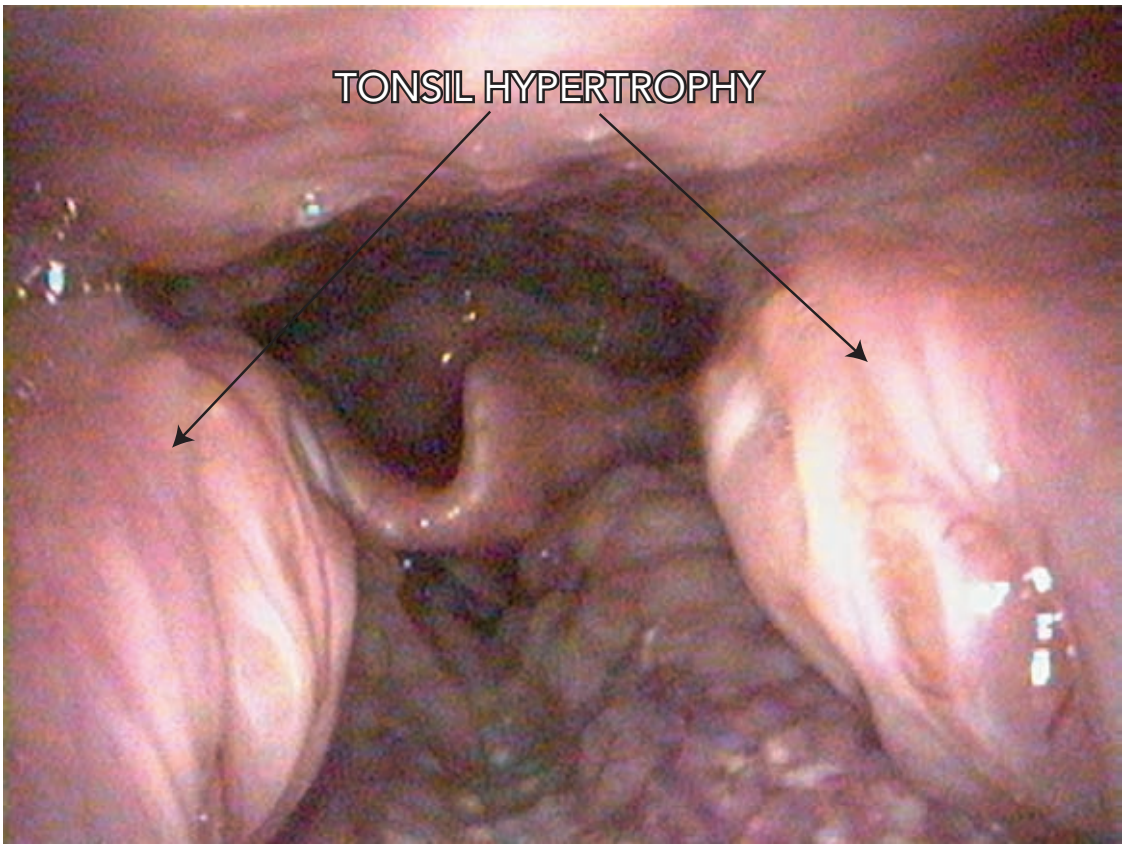


FIGURE 13.2 Tonsil hypertrophy (on fiberoptic laryngoscopy examination).

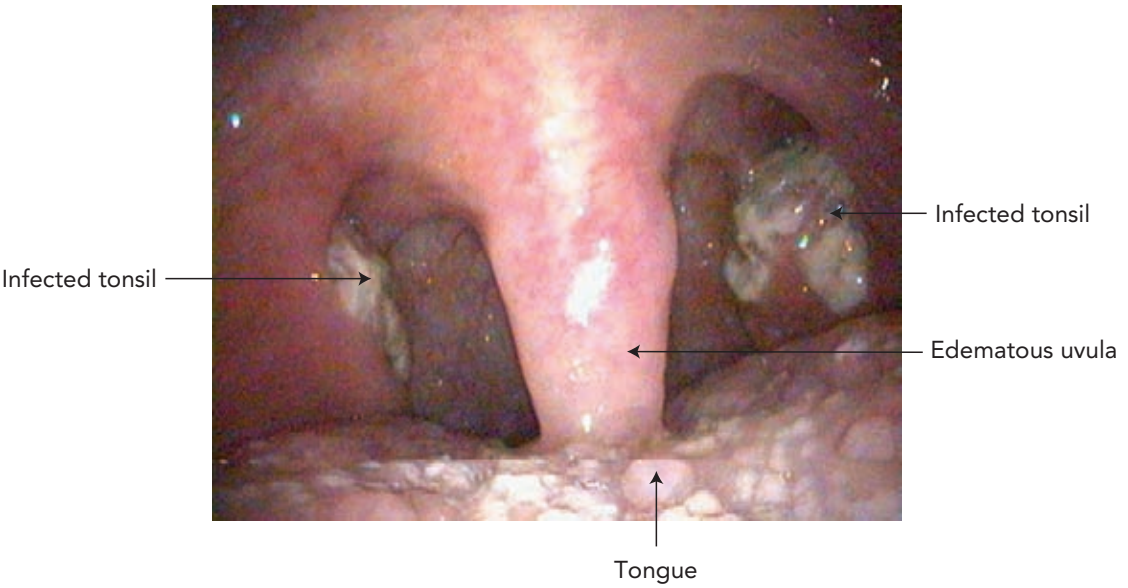


FIGURE 13.3 Tonsillitis.

Evaluation and Management of Salivary Gland Conditions

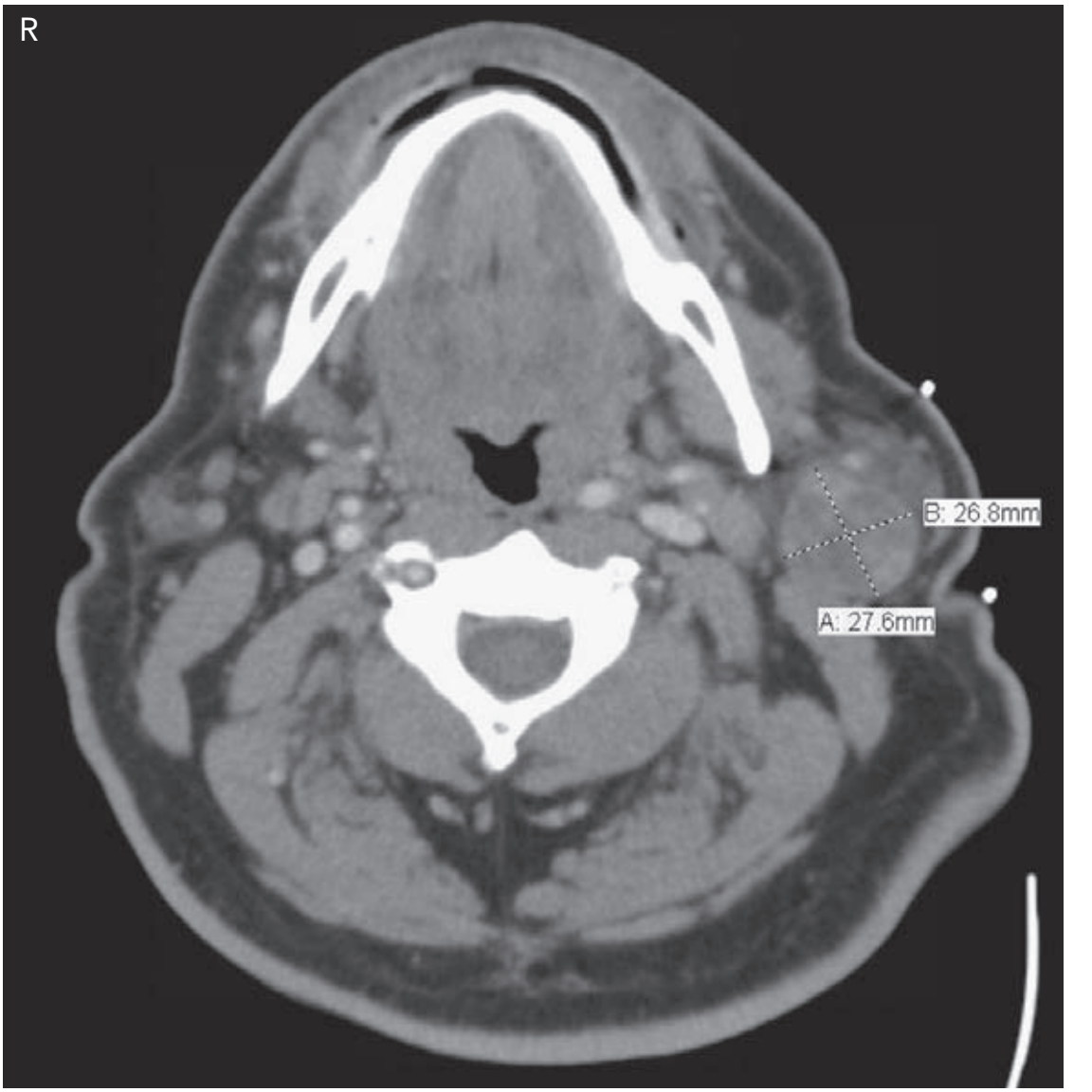


FIGURE 15.1 Warthin's tumor. Within left parotid gland there is a peripherally enhancing mass with smooth well-defined margins arising within the deep parotid lobe and extending below it, measuring 2.8 x 2.77 cm. It abuts the sternocleidomastoid. Pathology confirmed Warthin's tumor.

Evaluation and Management of Benign Neck Conditions

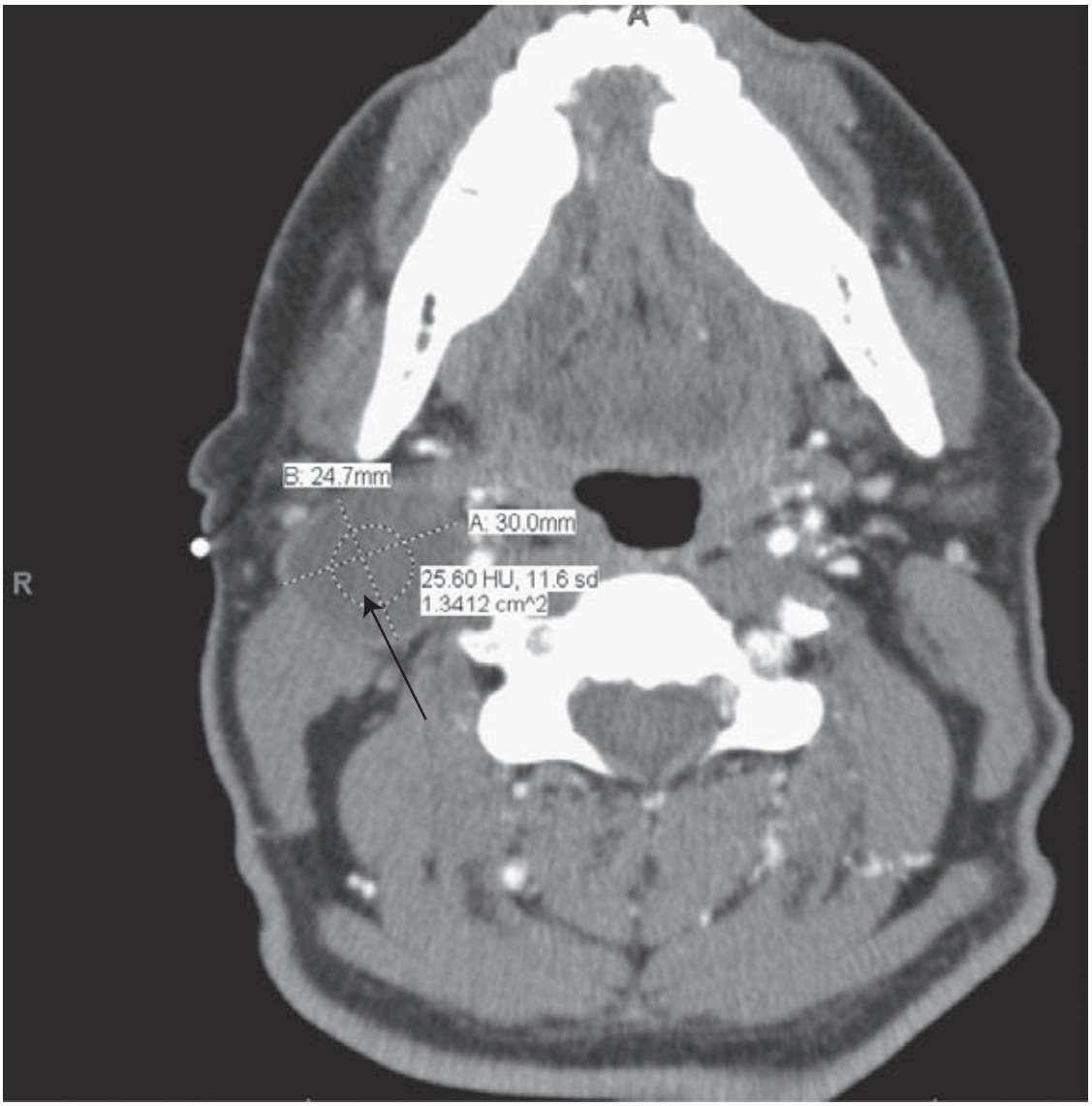


FIGURE 16.1 Branchial cleft cyst. Cyst in the right neck anterior to the parotid gland. Excision of the lesion was done and it was determined to be moderately differentiated cystic squamous cell carcinoma.

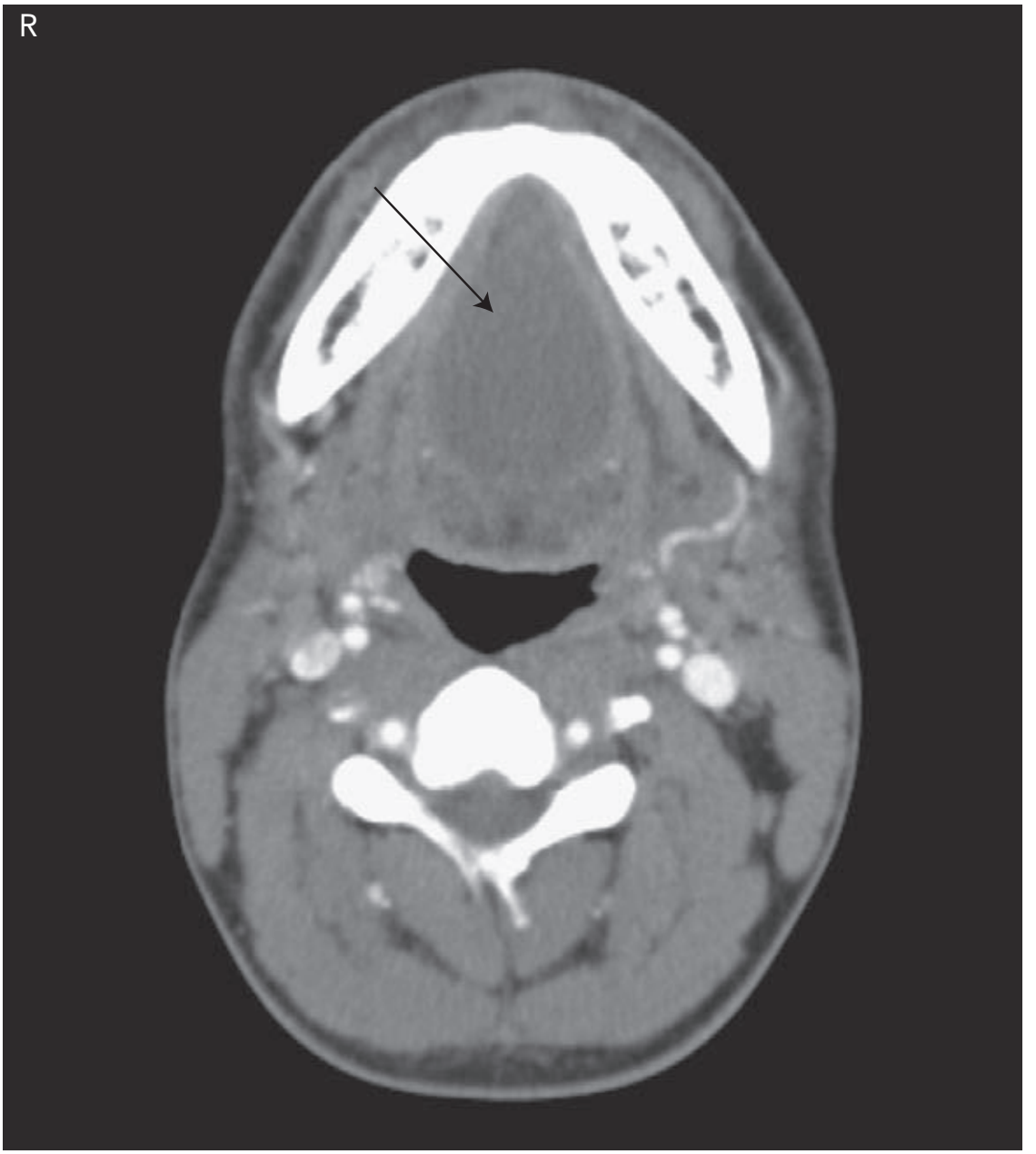


FIGURE 16.2 Thyroglossal duct cyst: Rounded lesion within midline of the tongue measures 3.3 x 6.1 x 4.5 cm with no evidence of calcification. The lesion is above the hyoid bone without extension beyond the borders of the tongue.

Overview of Malignant Neck Conditions

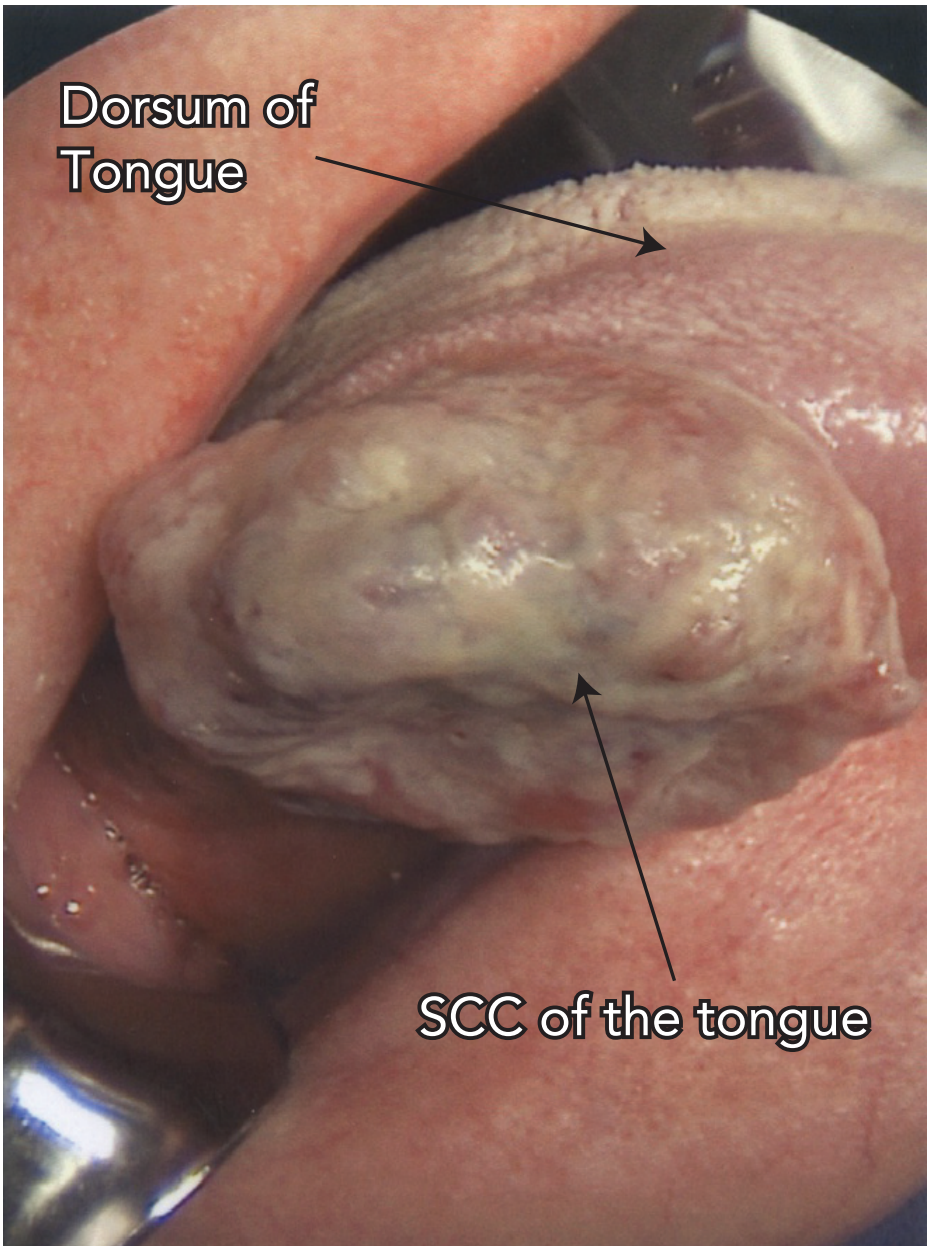


FIGURE 17.1 Tongue mass.

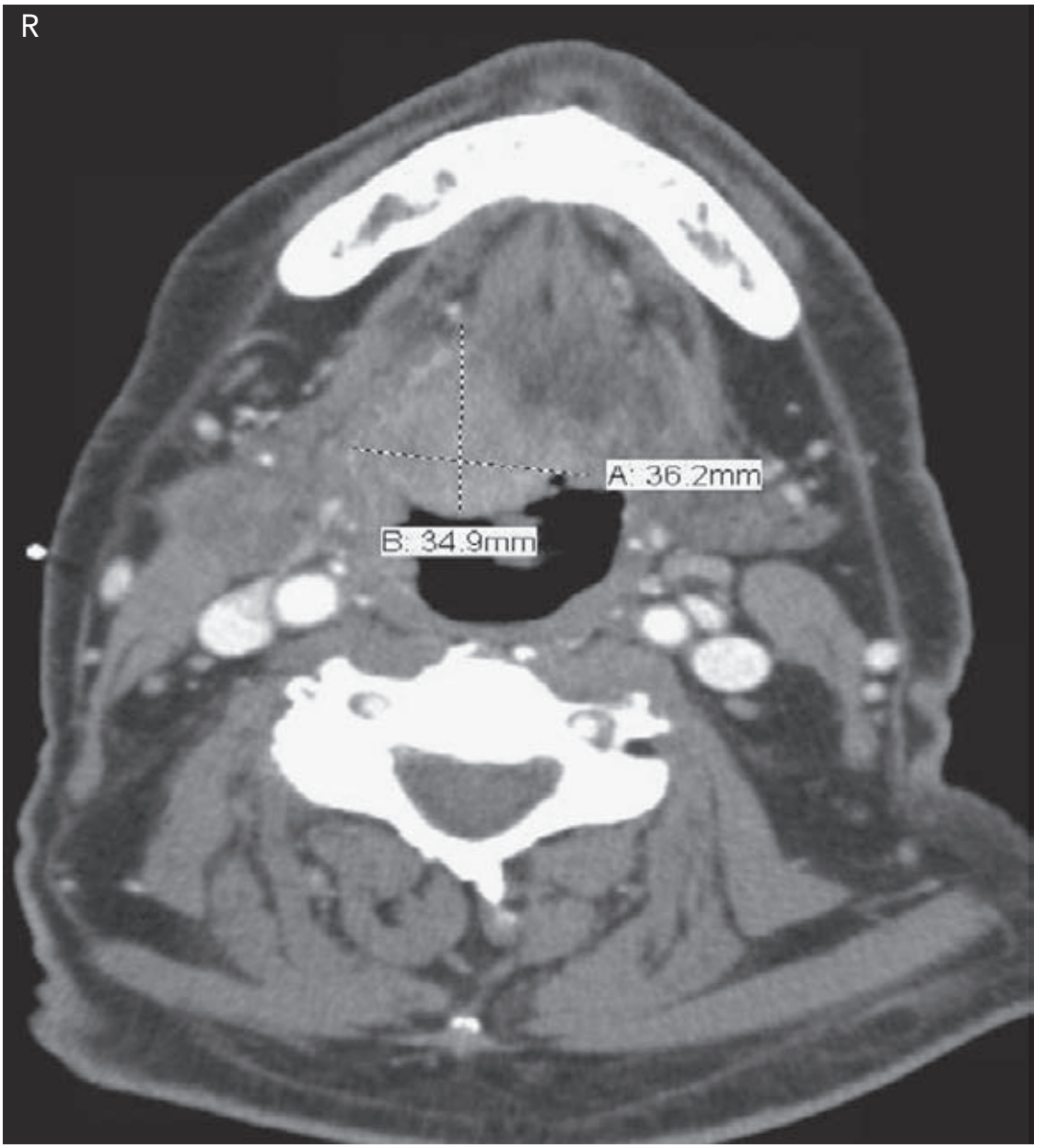


FIGURE 17.2 Squamous cell carcinoma at the base of the tongue: Mass has irregular margins, crossing the midline and measuring 3.7 x 3.4 x 5.9 cm. It was determined to be a moderately to poorly differentiated squamous cell carcinoma predominantly involving the oropharynx with extension into the posterior tongue.

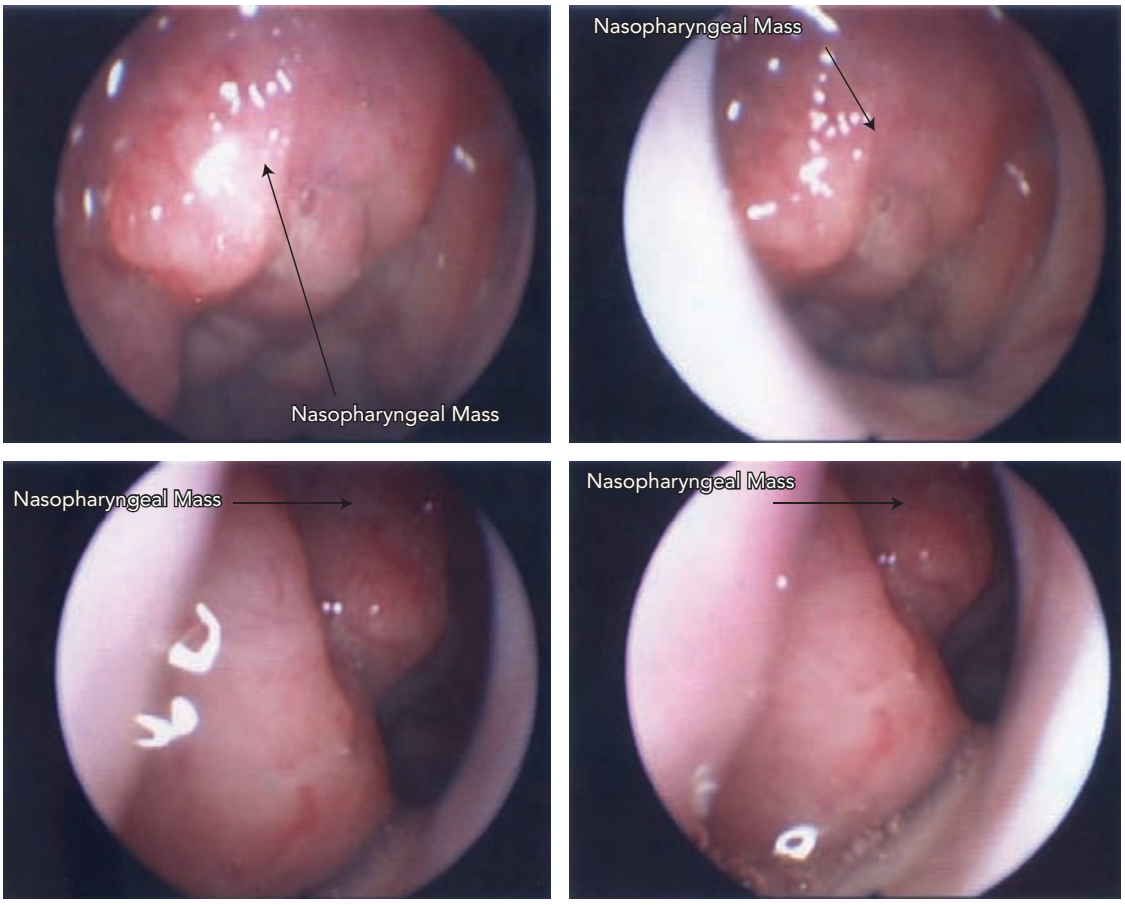


FIGURE 17.3 Nasopharyngeal mass.

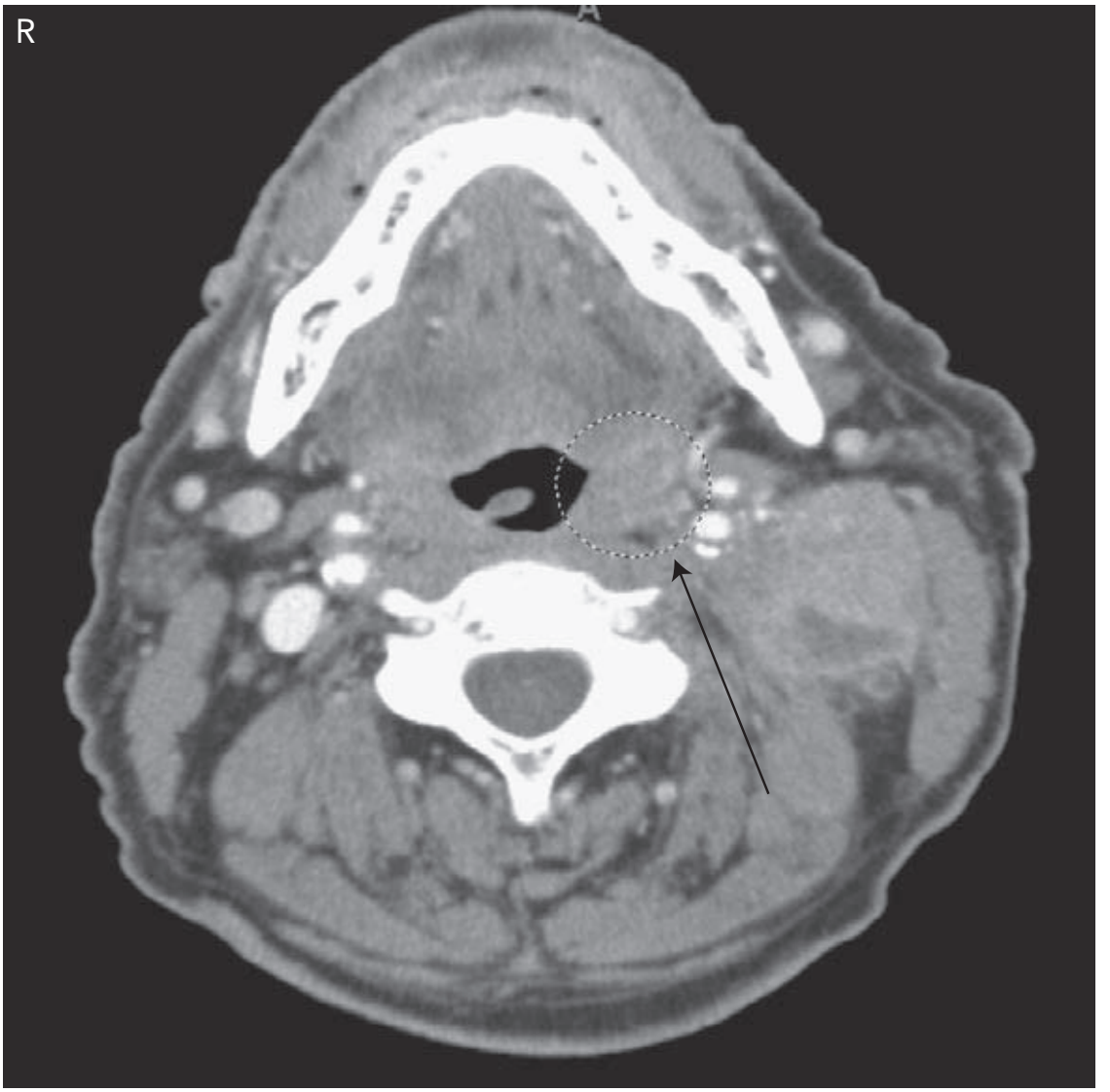


FIGURE 17.4 Squamous cell carcinoma of neck: CT with contrast shows a left neck mass interior to the sternocleidomastoid, with increased heterogeneity, compatible with necrosis. The mass abuts the left carotid artery. There are multiple adjacent lymph nodes as well. Pathology results indicated that the neck mass was a moderately differentiated squamous cell carcinoma.

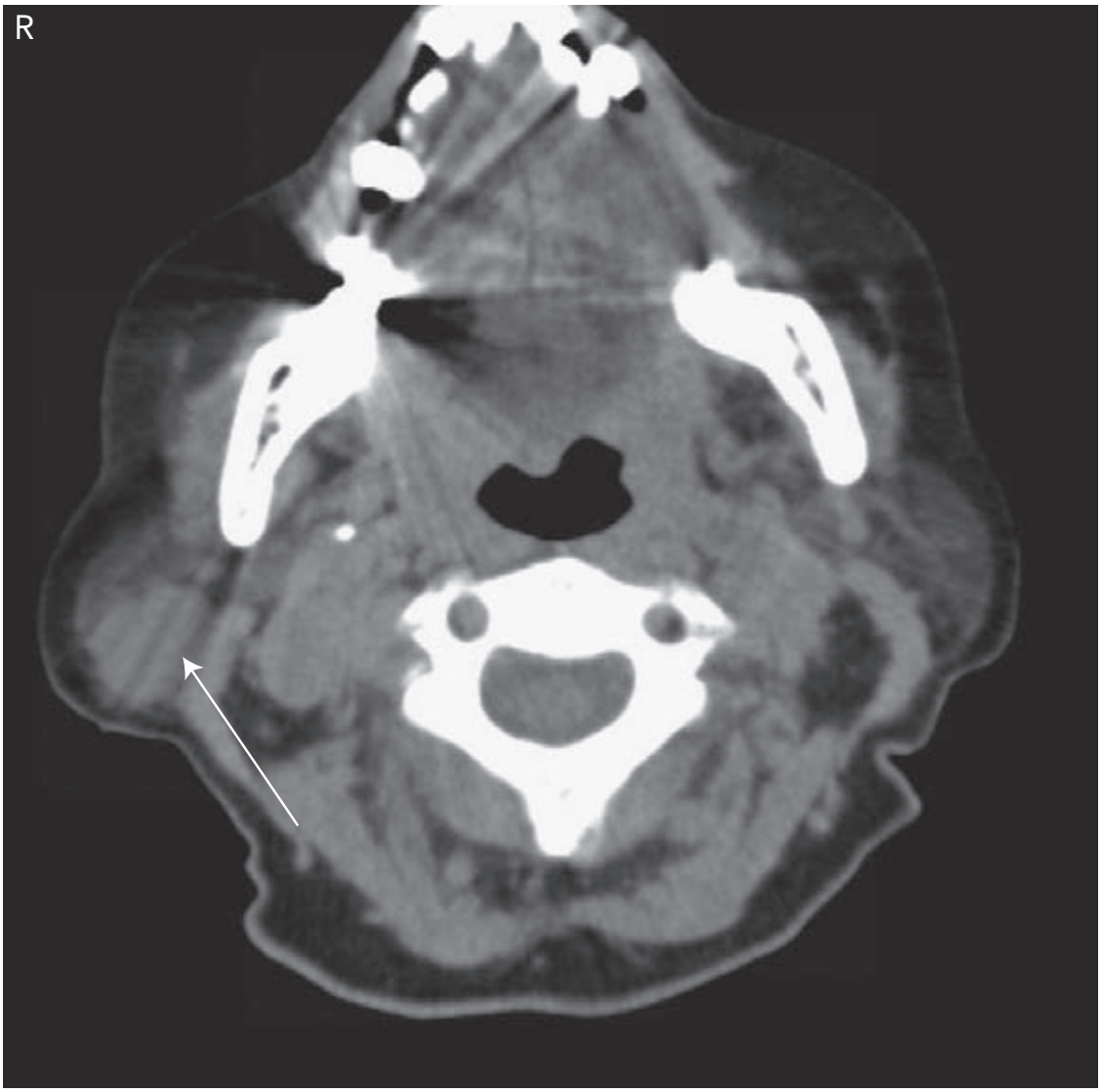


FIGURE 17.5 Lymphoma: Solid right parotid gland mass just inferior to the right ear along the posterior aspect of the inferior-most parotid gland, 20 x 13 mm. The borders are indistinct with mild surrounding fatty infiltration. No calcification is observed. Pathology indicated malignant lymphoma, follicular type.

Evaluation and Management of Trachea Disorders and Conditions

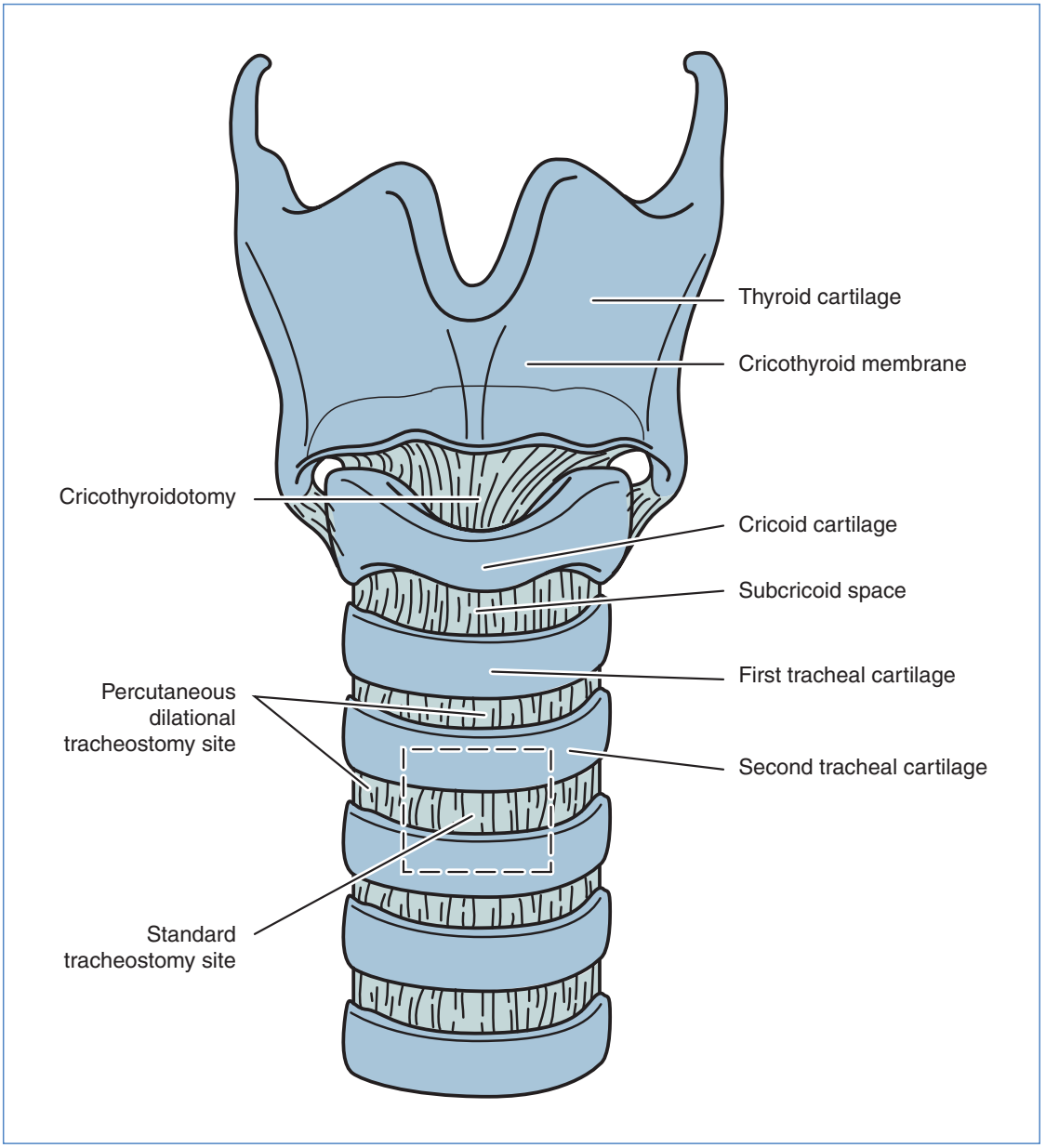


FIGURE 20.1 Tracheostomy tube insertion site.

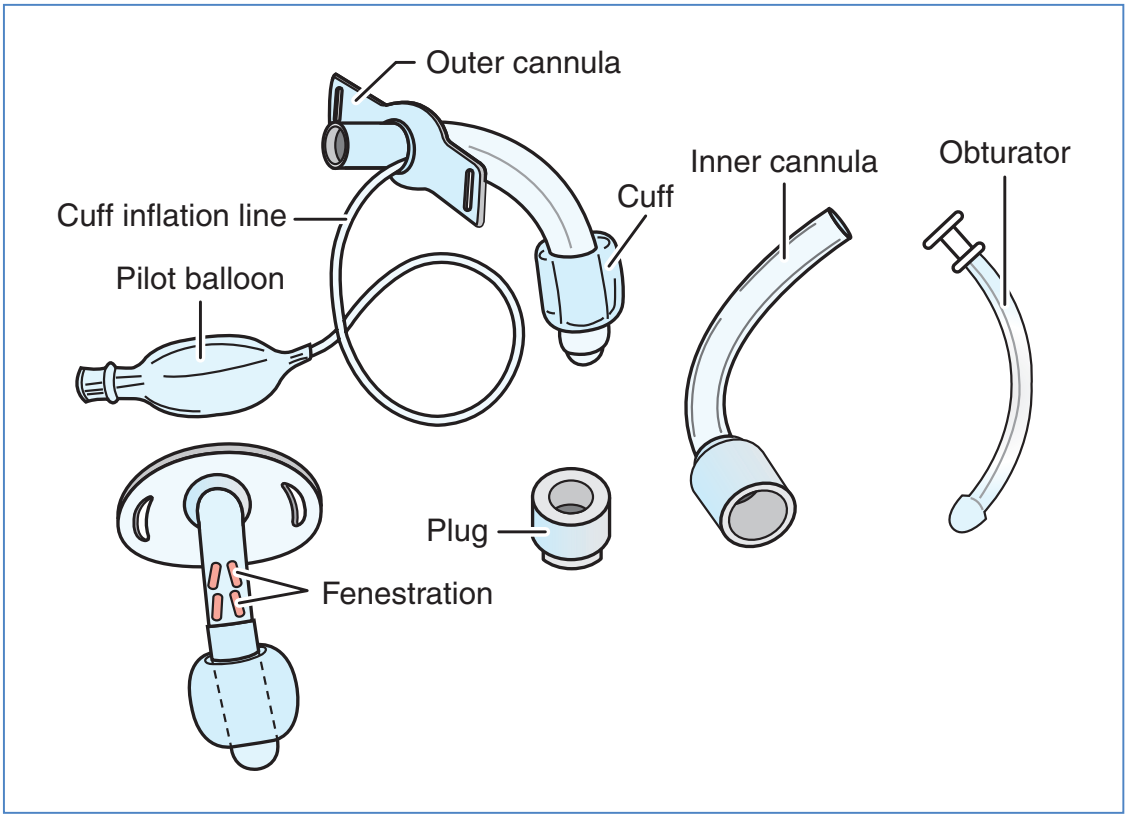


FIGURE 20.2 Tracheostomy tube.

Evaluation and Management of Larynx and Hypopharynx Disorders

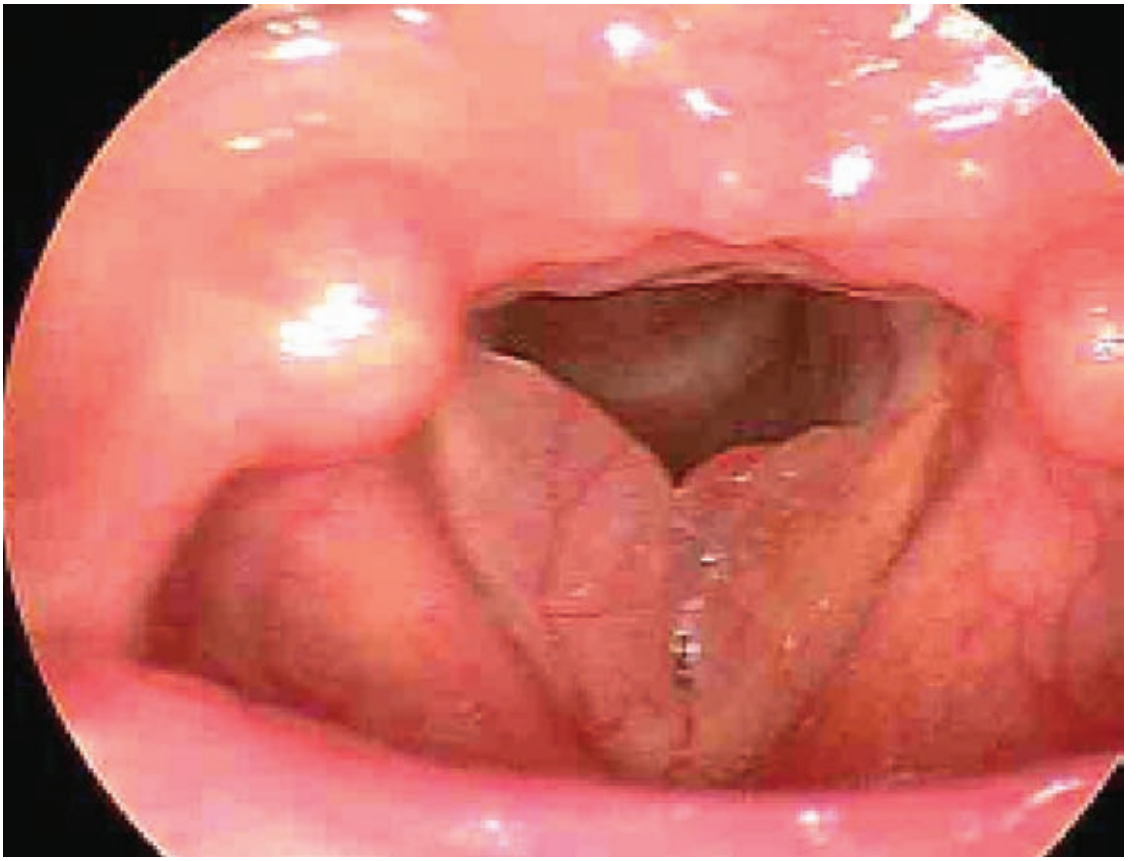


FIGURE 22.1 Reinke's edema.

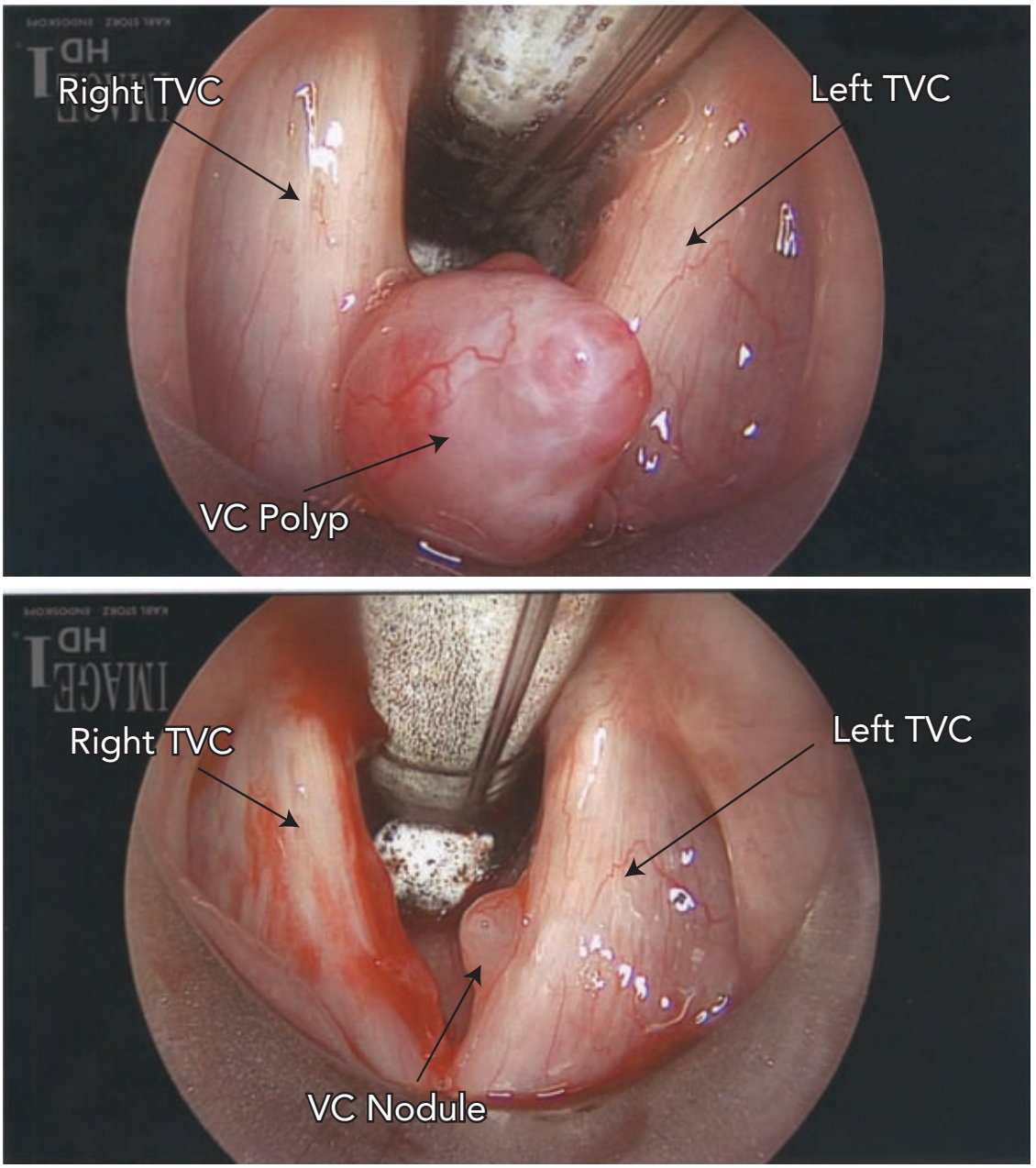


FIGURE 22.2 Vocal cord polyp and nodule.

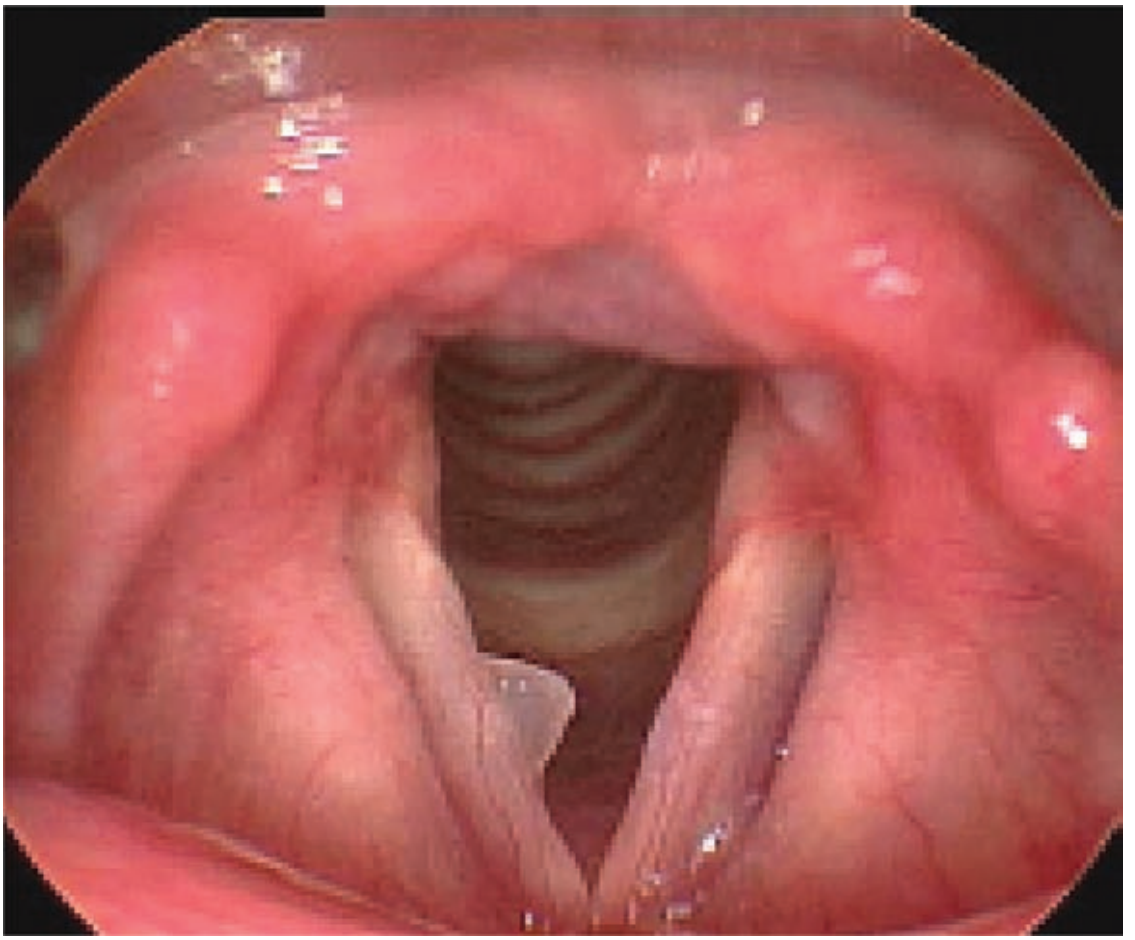


FIGURE 22.3 Right true vocal cord polyp.

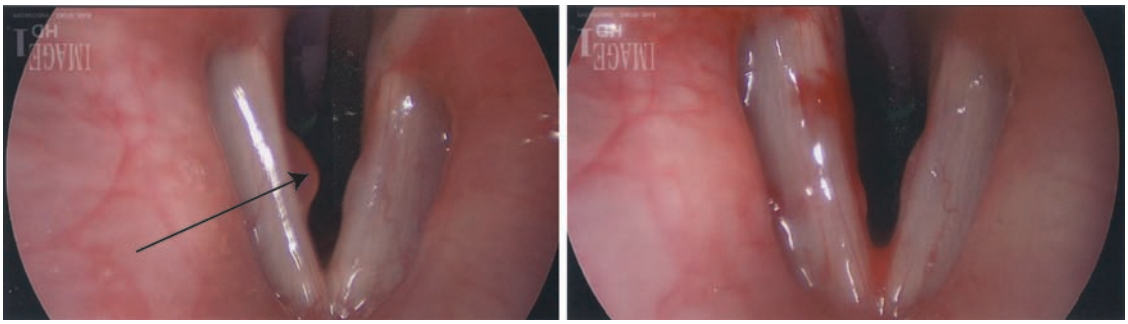


FIGURE 22.4 Right true vocal cord polyp before and after excision.

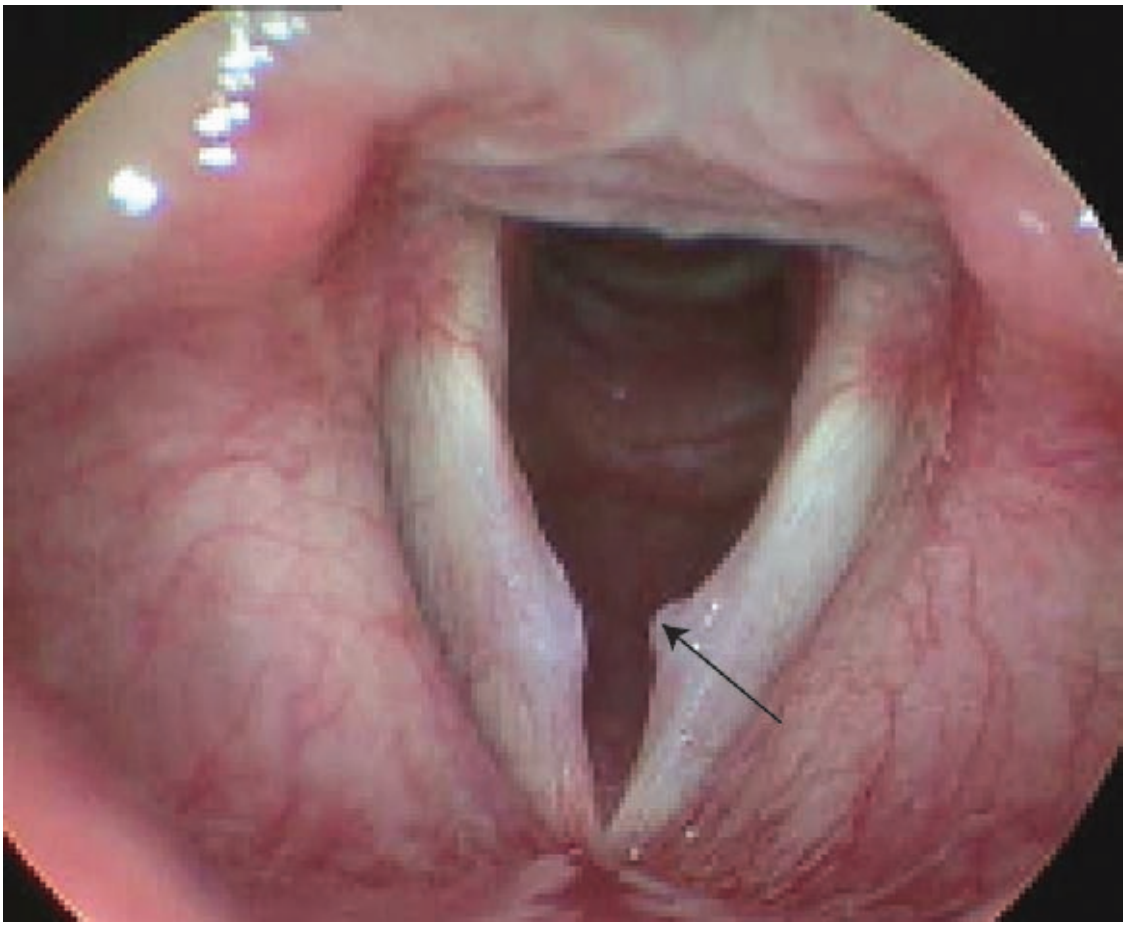


FIGURE 22.5 Vocal cord cysts.

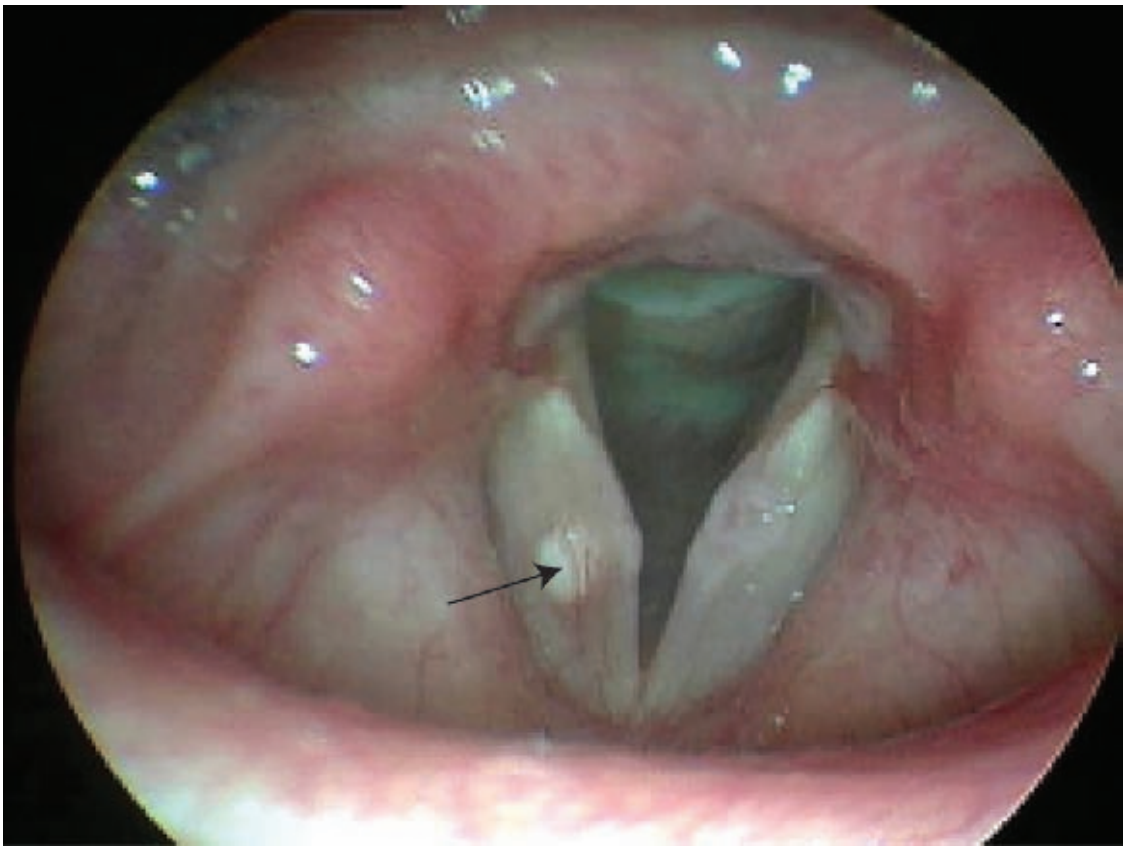


FIGURE 22.6 Right true vocal cord intracordal cyst.

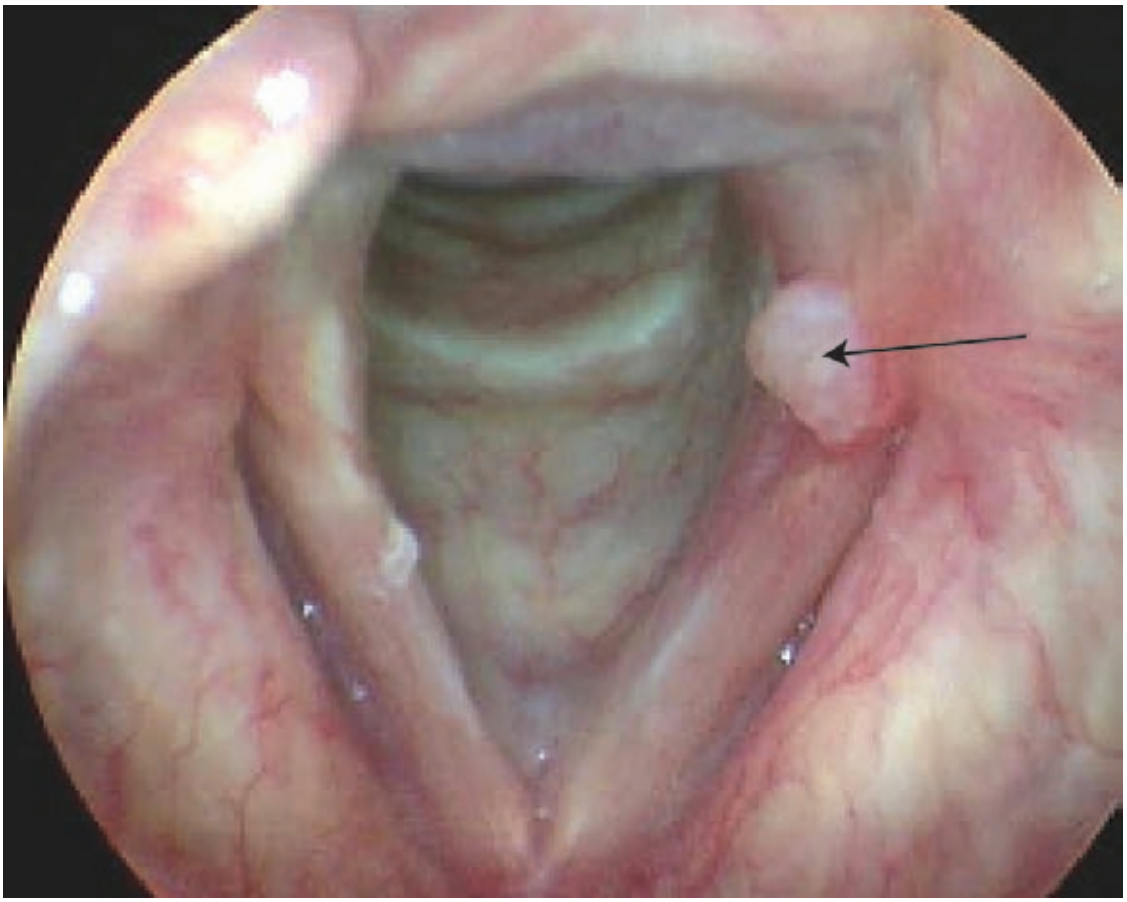


FIGURE 22.7 Vocal cord granuloma.

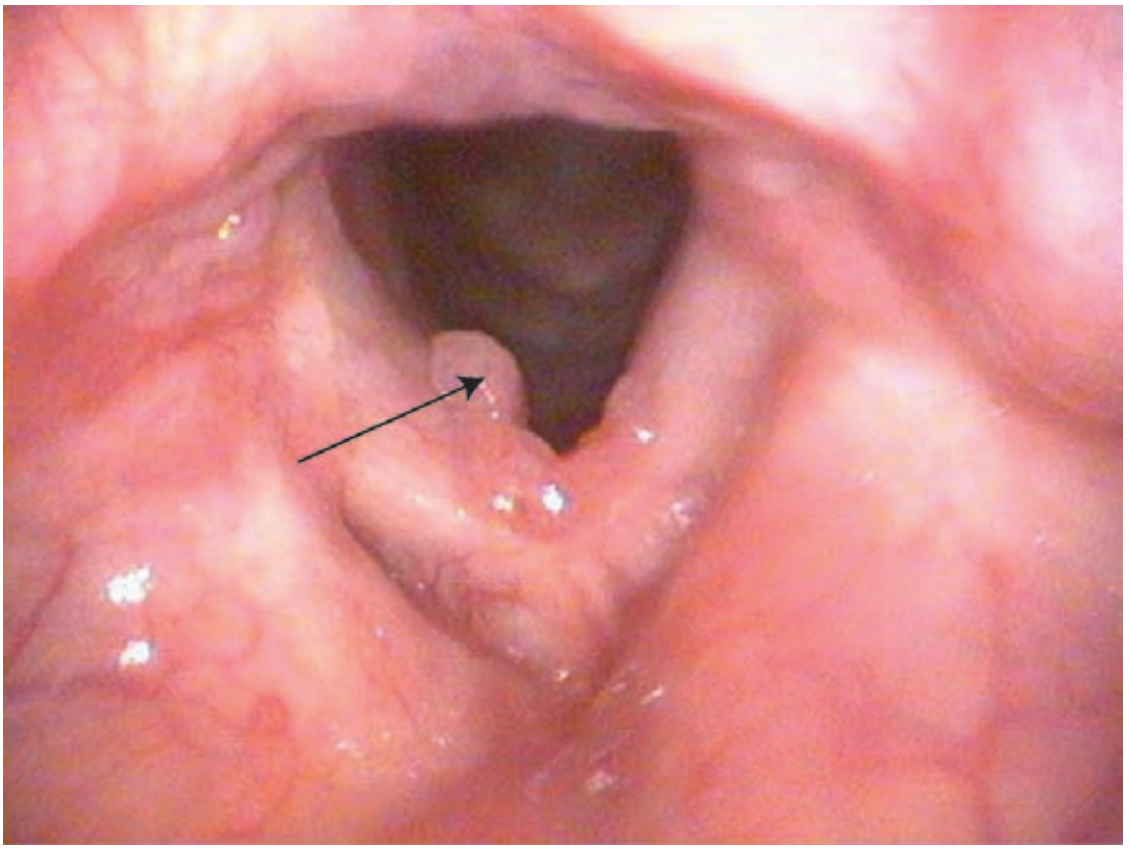


FIGURE 22.8 Vocal cord papilloma.

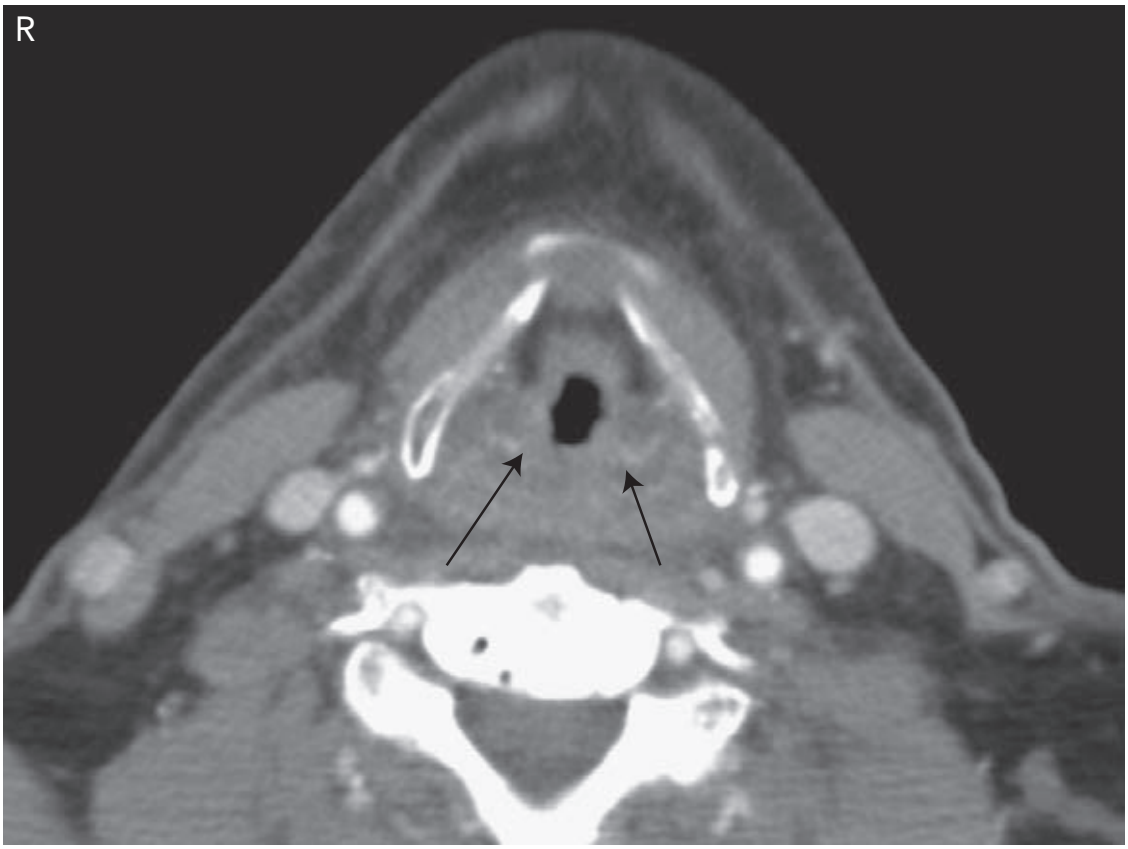


FIGURE 22.9 Squamous cell carcinoma of right true vocal cord. CT shows significant soft tissue density surrounded and nearly occluded by the glottic portion of the airway. CT findings were worrisome for malignancy. Biopsy results confirmed moderately differentiated squamous cell carcinoma of the right true vocal cord.