



Head and Neck

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Diseases of the head and neck range from the common cold to uncommon neoplasms of the ear and nose. Those selected for discussion are assigned, sometimes arbitrarily,

to one of the following anatomic sites: (1) oral cavity; (2) upper airways, including the nose, pharynx, larynx, and nasal sinuses; (3) ears; (4) neck; and (5) salivary glands.

ORAL CAVITY

Diseases of Teeth and Supporting Structures

Caries (Tooth Decay)

Dental caries is caused by focal demineralization of tooth structure (enamel and dentin) by acidic metabolites of fermenting sugars that are produced by bacteria. Caries is one of the most common diseases worldwide and is the main cause of tooth loss before age 35. Traditionally, the prevalence of caries has been higher in industrialized countries, where there is ready access to processed and refined foods containing large amounts of carbohydrates. However, global trends have changed the demographics. First, the rate of caries has markedly dropped in countries such as the United States, where improved oral hygiene

has improved and fluoridation of the drinking water is widespread. Fluoride is incorporated into the crystalline structure of enamel, forming fluoroapatite, which contributes to the resistance to degradation by bacterial acids. Second, with the globalization of the world's economy, processed foods are being increasingly consumed in developing nations. With these trends, one can expect the rate of caries to increase dramatically in these regions of the world.

Gingivitis

Gingivitis is inflammation of the oral mucosa surrounding the teeth. It is the result of a poor oral hygiene and leads to the accumulation of dental plaque and calculus.