

of the tongue, with fissuring and ulcerations. In conditions such as Sjögren syndrome, concomitant inflammatory enlargement of the salivary glands may also be observed. Complications of xerostomia include increased rates of dental caries, candidiasis, as well as difficulty in swallowing and speaking.

Inflammation (Sialadenitis)

Sialadenitis may be induced by trauma, viral or bacterial infection, or autoimmune disease. Mucoceles are the most common type of inflammatory salivary gland lesion. The most common form of viral sialadenitis is mumps, in which the major salivary glands, particularly the parotids, are affected (Chapter 8). Other glands (e.g., the pancreas and testes) may also be involved. As already discussed, autoimmunity underlies Sjögren syndrome, in which widespread inflammation of the salivary glands and the mucus-secreting glands of the mucosa induces xerostomia. Concomitant involvement of the lacrimal glands in Sjögren syndrome may also produce dry eyes—*keratoconjunctivitis sicca*.

Mucocele. This is the most common lesion of the salivary glands. It results from either blockage or rupture of a salivary gland duct, with consequent leakage of saliva into the surrounding connective tissue stroma. Mucoceles are most often found on the lower lip and are the result of trauma (Fig. 16-14A). They occur at all ages but are most common in toddlers, young adults, and the elderly, who are more prone to falling. Clinically, they present as fluctuant swellings of the lower lip that have a blue translucent hue. Patients may report a history of changes in the size of the lesion, particularly in association with meals. Histologically, mucoceles are pseudocysts with cyst-like spaces lined by inflammatory granulation tissue or by fibrous connective tissue. The cystic spaces are filled with mucin and inflammatory cells, particularly macrophages (Fig. 16-14B). Complete excision of the cyst and its accompanying minor salivary gland

lobule is required, as incomplete excision may lead to recurrence.

Ranula is a term reserved for epithelial-lined cysts that arise when the duct of the sublingual gland has been damaged. A ranula may become so large that it develops into a “plunging ranula”, a colorful description of a cyst that has dissected through the connective tissue stroma connecting the two bellies of the mylohyoid muscle.

Sialolithiasis and Nonspecific Sialadenitis. Nonspecific bacterial sialadenitis, most often involving the major salivary glands, particularly the submandibular glands, is a common condition, usually secondary to ductal obstruction produced by stones (*sialolithiasis*). The common offenders are *S. aureus* and *Streptococcus viridans*. The stone formation is sometimes related to obstruction of the orifices of the salivary glands by impacted food debris or by edema about the orifice after some injury. Frequently, no underlying cause can be detected. Decreased secretory function may also predispose to secondary bacterial invasion, as sometimes occurs in patients receiving long-term phenothiazines that suppress salivary secretion. Decreased salivary secretions caused by dehydration may lead to the development of bacterial suppurative parotitis in elderly patients with a recent history of major thoracic or abdominal surgery.

Whatever the origin, the obstructive process and bacterial invasion lead to a nonspecific inflammation of the affected glands that may be largely interstitial or, when induced by staphylococcal or other pyogens, may be associated with overt suppurative necrosis and abscess formation. Unilateral involvement of a single gland is the rule. The inflammatory involvement causes painful enlargement and sometimes a purulent ductal discharge.

Neoplasms

Despite their relatively simple morphology, the salivary glands give rise to no fewer than 30 histologically distinct tumors. A classification and the relative incidence of

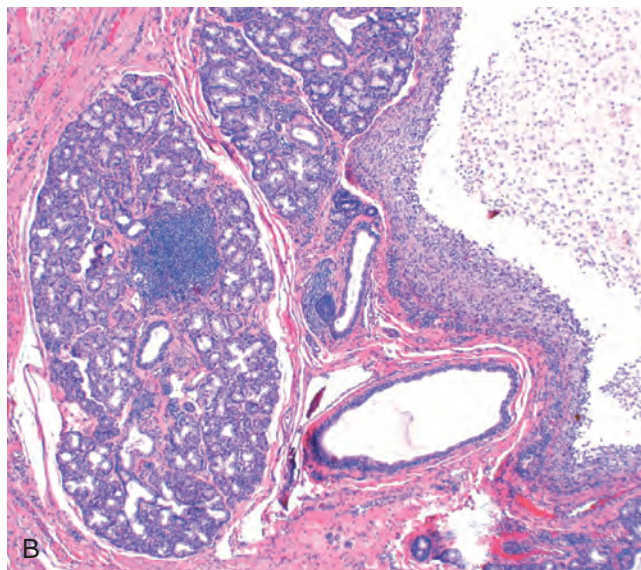


Figure 16-14 Mucocele. **A**, Fluctuant fluid-filled lesion on the lower lip subsequent to trauma. **B**, Cystlike cavity filled with mucinous material and lined by organizing granulation tissue.