



Figure 5.18f. The tissue bed is noted, particularly the lingual nerve (retracted with the vessel loop) and Wharton's duct. Reprinted from: Berry BL. Sialadenitis and sialolithiasis. Diagnosis and management. In: The Comprehensive Management of Salivary Gland Pathology, Carlson ER (ed), Oral and Maxillofacial Surgery Clinics of North America, WB Saunders, Philadelphia, 479–503.



Figure 5.18g. A 6-month postoperative evaluation showed acceptable healing. Reprinted from: Berry BL. Sialadenitis and sialolithiasis. Diagnosis and management. In: The Comprehensive Management of Salivary Gland Pathology, Carlson ER (ed), Oral and Maxillofacial Surgery Clinics of North America, WB Saunders, Philadelphia, 479–503.

Summary

- Sialoliths are calcium phosphate stones that develop within the ductal system of salivary glands.
- Sialolithiasis is thought to affect approximately 1% of the population based on autopsy studies.
- It has been estimated to represent more than 50% of major salivary gland disease and is the most common cause of acute and chronic salivary gland infections.
- Approximately 85% of sialolithiasis occurs in the submandibular gland, 10% in the parotid gland, 5% in the sublingual gland, and the incidence of this pathology is rare in the sublingual gland and minor salivary glands.
- 80% of submandibular sialoliths are radio-opaque, while 40% of sialoliths of the parotid gland are radio-opaque.
- Systemic disorders of calcium metabolism do not seem to represent predisposing factors to sialolithiasis. The one exception to this rule is gout, where a higher incidence of uric acid stones has been observed.
- 75–85% of submandibular stones are located in the duct, while parotid stones are located

in the hilum or gland parenchyma in at least half of cases.

- Several “great imitators” of submandibular sialolithiasis exist, including scrofula, phleboliths, osteomas, and occasionally carotid plaques.
- Numerous techniques are available to treat sialolithiasis including surgical sialolithotomy with or without sialodochoplasty, sialoendoscopy with sialolithotomy, intracorporeal or extracorporeal lithotripsy, or gland removal.

References

- Anneroth G, Hansen LS. 1983. Minor salivary gland calculi. A clinical and histopathological study of 49 cases. *Int J Oral Maxillofac Surg* 12:80–89.
- Arzoz E, Santiago A, Esnal F, Palomero R. 1996. Endoscopic intracorporeal lithotripsy for sialolithiasis. *J Oral Maxillofac Surg* 54:847–850.
- Baurmash HD. 2004. Submandibular salivary stones: Current management modalities. *J Oral Maxillofac Surg* 62:369–378.
- Baurmash H, Dechiara SC. 1991. Extraoral parotid sialolithotomy. *J Oral Maxillofac Surg* 49:127–132.
- Berry RL. 1995. Sialadenitis and sialolithiasis: Diagnosis and management. *Oral Maxillofac Surg Clin North Am* 7:479–503.