



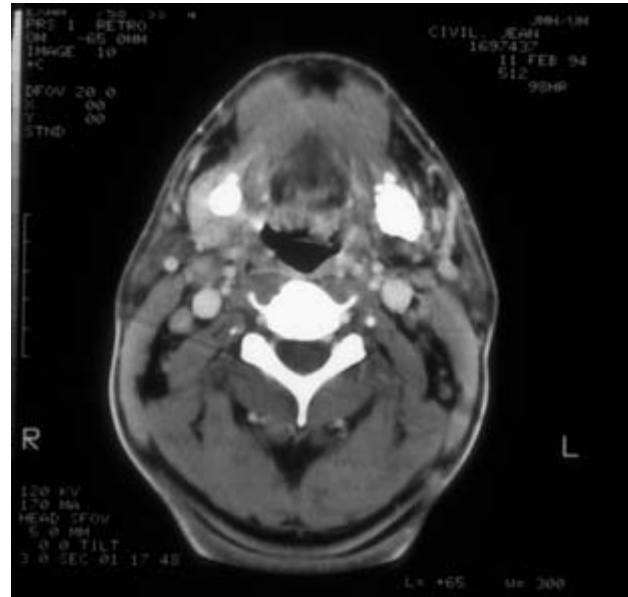
**Figure 5.5a.** This very large sialolith is associated with the right submandibular gland as seen on panoramic radiograph.



**Figure 5.5b.** Due to its size, it might be confused with an osteoma of the mandible such that computerized tomograms help to identify its presence within the submandibular gland.

## Differential Diagnosis and Diagnosis of Sialolithiasis

Patients with sialolithiasis most commonly present with clinical and historical evidence of salivary calculi. A history of submandibular swelling, prandial pain, and bouts of sialadenitis are highly



**Figure 5.6.** This axial section of computerized tomograms shows the presence of bilateral sialoliths of the submandibular glands.

suggestive of a diagnosis of sialolithiasis. This notwithstanding, many patients are asymptomatic such that only a panoramic radiograph may allow for the diagnosis of submandibular sialolithiasis, as it may reveal calcifications within the submandibular triangle. It has been observed that submandibular stones located anteriorly are more often symptomatic than those lodged in the intraglandular portion of the duct (Karas 1998). While such calcifications may lead to a diagnosis of submandibular sialolithiasis, it is important for the clinician to consider other diagnoses that present with submandibular calcifications, particularly when pain is absent. Among these are calcified lymph nodes associated with mycobacterial adenitis (scrofula) (Figure 5.7), phleboliths associated with oral/facial hemangiomas (Figure 5.8), and a mandibular osteoma as might occur in Gardner's syndrome (Figure 5.9). All of these calcifications may, at first glance, appear similar to submandibular sialolithiasis. Close examination of panoramic radiographs may, however, allow for the clinician to establish a radiographic diagnosis other than submandibular sialolithiasis (Mandel 2006). Most submandibular calculi contain smooth borders when they exist within the gland. Calcified lymph nodes generally show irregular borders, and osteomas of the mandible are larger than most salivary