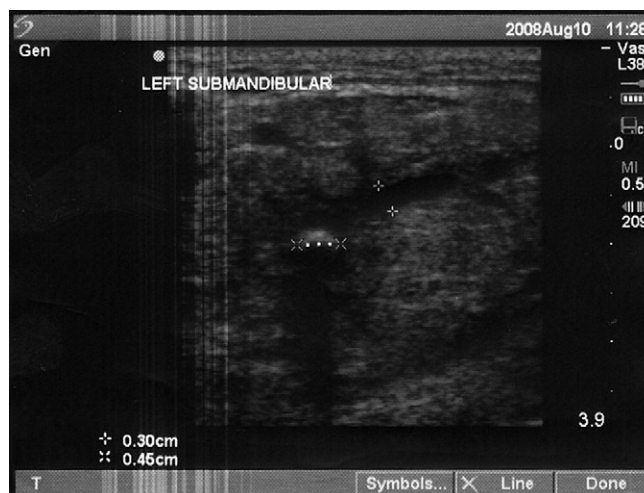


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0196-0644/\$-see front matter  
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doi:10.1016/j.annemergmed.2009.06.004



**Figure.** Ultrasonography of left submandibular gland. Used with permission of Zachary D. Tebb, MD, Denver Health Medical Center, Denver, CO.

[Ann Emerg Med. 2009;54:e18-e19.]

A 48-year-old man presented to the emergency department, complaining of 7 days of progressive painful swelling localized to the left side of his neck. The patient denied any fevers or shortness of breath, although he observed mild dysphagia. The patient's medical history was significant for a salivary gland abscess 8 years before. His physical examination result was remarkable for a 5-cm-by-3-cm left-sided lateral neck mass, located below the angle of the mandible, that was tender to palpation, nonfluctuant, and without surrounding cellulitis. The [Figure](#) shows a bedside emergency ultrasonogram of the mass.

*For the diagnosis and teaching points, see page e18.  
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## IMAGES IN EMERGENCY MEDICINE

*(continued from p. e18)***DIAGNOSIS:**

*Sialoadenitis and submandibular duct obstruction.* The ultrasonography revealed a dilated submandibular duct with an obstructing salivary stone. The most common site of salivary stones is the submandibular gland.<sup>1</sup> Calculi involving the submandibular gland are found in Wharton's duct 85% of the time, and the remainder are found within the gland.<sup>2</sup> Imaging studies can be used to confirm the diagnosis of sialolithiasis. Computed tomography (CT) is the current imaging modality of choice, although it must be executed with thin cuts to appreciate smaller stones. Ultrasonography has a sensitivity of greater than 90% for stones larger than 2 mm and avoids the increased radiation to the neck associated with CT.<sup>3</sup> Treatment involves conservative measures that include warm compresses, local massage, and sialogogues, as well as antistaphylococcal antibiotics for superinfection and pain control. Invasive treatment includes transoral removal, lithotripsy, wire basket retrieval, and sialoendoscopy. The patient was treated with a 7-day course of antibiotics and sialogogues, and the patient's symptoms were resolved within 2 weeks.

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