Thyroid Abscess Associated With Pyriform Sinus Fistula

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A 24-year-old previously healthy man presented with a 3-day history of sore throat, dysphagia, and painful neck swelling. On physical examination, his left anterior neck was swollen and tender. Contrast-enhanced computed tomography of the neck revealed a cystic lesion with enhancing walls and tracheal compression (Figure 1). A diagnosis of thyroid abscess was made. The patient received parenteral antibiotic therapy as well as incision and drainage of the abscess. Pus cultures grew *Streptococcus viridans* and *Prevotella buccae*. He improved and was discharged home 10 days later. At 3 weeks after discharge, barium esophagogram was performed and revealed a left pyriform sinus fistula (Figure 2). To prevent recurrence, surgical removal or chemocauterization of the fistula was recommended to the patient, but he refused. At 5-year follow-up, there was no recurrence of the infection.

Thyroid abscess is a rare but serious infectious disease. It usually occurs in patients with trauma, invasive procedures, immunosuppression, preexisting thyroid disease, or anatomical anomaly (such as pyriform sinus fistula).1-3 For this reason, a search for anatomical anomaly is required after controlling the acute infection in patients without the apparent causes.1,2 Pyriform sinus fistula is a rare congenital branchial cleft anomaly, more frequent in the left side, and associated with recurrent neck or thyroid infection.4,5 Surgical removal or chemocauterization of the fistula is recommended to prevent recurrent infection.3

**FIGURE 1.** Contrast-enhanced computed tomography of the neck revealed a thyroid abscess with tracheal compression (arrow).

**FIGURE 2.** A frontal spot image from barium esophagogram revealed a left pyriform sinus fistula.
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