A Curious Cause of Strangulation

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INTRODUCTION

Ludwig’s angina is a rare, potentially life-threatening cellulitis of the floor of the mouth described by Karl von Ludwig in 1836. The word angina is derived from “angere” which means “to choke” in Latin (angere) and “ankhone”, “to strangle” in Greek. In Ludwig’s angina, it is the feeling of strangulation secondary to lingual airway obstruction, which may result in death.

CASE PRESENTATION

A 97 year old white female with squamous cell carcinoma of the tongue status post multiple resections and osteoradionecrosis of the mandible presented with 5 days of difficulty swallowing following multiple inferior tooth extractions. She noticed pain and swelling in her lower jaw which advanced to the floor of her mouth. At admission, her temperature was 101.3F, white blood cell (WBC) count of 13.9. Physical exam revealed an elderly female in no apparent distress drooling due to copious oral secretions. Head, Eyes, Ears, Nose, and Throat (HEENT) examination showed submandibular erythema and edema involving the floor of the mouth and tongue. Respiratory examination was significant for coarse breath sounds throughout with rhonchi and upper airway rattling. Fiber-optic laryngoscopy revealed a patent laryngeal airway. She was admitted to ICU and started on intravenous (IV) Clindamycin, Decadron and Benadryl. The patient was transferred to the floors where she improved, but slowly. She was switched to Unasyn on day 5 of admission and continued to improve until discharge.

DISCUSSION

This patient had factors in her history that may delay the diagnosis of Ludwig’s angina, but her case demonstrates a classic presentation of the disease. Ludwig’s angina involves the flora of the mouth and tends to present after a dental procedure or odontogenic infection. Streptococcus viridans is the most commonly isolated organism along with oral anaerobes. Most cases originate from an infection involving the second or third mandibular molar teeth. The roots of these teeth are located below the attachments of the mylohyoid muscle to the mandible, causing the submylohyoid space to be the area of initial involvement. The infection spreads into the submandibular space and results in swelling of the tongue and floor of the mouth. The tongue may be pushed up and backward, causing airway compromise. It is recommended that Ludwig’s angina be treated non-operatively with IV antibiotic and steroid therapy and close airway observation. If the patient requires intubation, a fiber-optic intubation via the nasal route is recommended because blind oral or naso-tracheal intubation has the potential to induce severe laryngospasm. If intubation is not possible, tracheostomy is recommended.1,2

REFERENCES
