

## Lack of Dental Care and Ludwig'Angina: Could It Have Been Prevented?

Katherine Tobin<sup>1</sup>, Laila Tul Qadar<sup>2</sup>, Hannah Owens<sup>1</sup> and Ahmed H Abdelfattah<sup>3\*</sup>

<sup>1</sup>PA students, Internal Medicine/Hospital Medicine, University of Kentucky College of Medicine, Lexington, USA

<sup>2</sup>Internal Medicine, Dow University of Health Sciences, Civil Hospital Karachi, Karachi, Pakistan

<sup>3</sup>Assistant Professor of Internal Medicine, Internal Medicine/Hospital Medicine, University of Kentucky College of Medicine, Lexington, USA

\*Corresponding author: Ahmed H Abdelfattah, Assistant Professor of Internal Medicine, Internal Medicine/Hospital Medicine, University of Kentucky College of Medicine, Lexington, USA. E-mail: [AhmedAbdelfattah@uky.edu](mailto:AhmedAbdelfattah@uky.edu)

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**Figure 1:** Right-sided submandibular swelling.



**Figure 2:** CT scan depicted 4.2 x 3.3 x 4.3 cm abscess around the posterior right mandibular molar (#32) with soft tissue swelling.



**Figure 3:** Submandibular lesion post incision and drainage.

### Clinical Image

A 57-year-old man presented with a one-week history of right-sided dental pain, swelling, and trouble swallowing that has gradually worsened. He reported having limited access to dental care and, as a result, has poor dental health. He was evaluated for small right-sided facial swelling four days ago and was prescribed methylprednisolone and clindamycin upon the initial visit.

The swelling worsened despite taking the medication as prescribed. A review of systems was positive for odynophagia and negative for shortness of breath and sore throat. Physical examination was significant for right-sided submandibular swelling (Figure 1) with purulent drainage from superficial skin, trismus, tenderness, swelling, and pain on movement and palpation of the jaw. A complete blood count (CBC) with differential, complete metabolic panel, and blood cultures were done. The CBC revealed leukocytosis with an increased number of absolute neutrophils. Blood cultures were negative. A computed tomography (CT) scan revealed a 4.2 x 3.3 x 4.3 cm abscess around the posterior right mandibular molar (#32) with soft tissue swelling (Figure 2).

After Oral and Maxillofacial Surgery consultation, he was diagnosed with Ludwig's angina and a right submandibular abscess. IV clindamycin and levofloxacin were started for broad coverage, given he has a penicillin allergy. He underwent a surgical incision, drainage of the abscess (Figure 3), and removal of all maxillary teeth. A Penrose drain was placed during surgery. *Streptococcus constellatus* was the organism identified from the abscess's tissue and gram stain analysis. Fungal cultures were negative. The antibiotics were changed to oral levofloxacin and metronidazole for five days post-surgical drainage.

Ludwig's angina is a rare, life-threatening entity with poor oral hygiene contributing to its development. Ludwig's angina, if it has concurrent soft tissue involvement, requires prompt diagnosis and treatment, including initiation of broad-spectrum antibiotics, securing airway, and surgical consult.