COPD Exacerbation Complicated by Ludwig’s Angina

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**Introduction:** The following case presentation is of a 71-year-old male initially brought into the emergency department (ED) with exacerbation of chronic obstructive pulmonary disease (COPD). COPD is a non-reversible, long term obstructive airway disease which is the third leading cause of death in the United States. **Case Presentation:** A 71-year-old male presented to the ED with complaints of wheezing and shortness of breath without chest pain. The patient stated his symptoms were progressing within the last 24 hours. He was placed on 2 liters of oxygen and given medication to reverse his bronchospasms. Approximately a week into his hospital stay the patient complained of a sore throat and difficulty breathing. The patient was febrile and developed pharyngeal and laryngeal edema. The patient was emergently taken to the operating room to receive a tracheostomy to protect his airway. Subsequently the patient was diagnosed with Ludwig’s Angina. The patient became ventilator dependent and was discharged to a long-term acute care facility.

**Discussion:** Upon inspection of the patient’s oral cavity there were ulcers noted resulting from poor dental hygiene. The ulcers caused an infection to develop around the patient’s airway which lead to his airway to become compromised. Dental health is an important part of everyday life. When individuals have untreated abscessed teeth or fail to comply with antibiotics after tooth extraction, they are at risk to develop Ludwig’s Angina. Since Ludwig’s Angina compromises the airway most patients will require intubation or tracheostomy, which leads to an increase in healthcare cost. This disease can be avoided with compliance and education to individuals on the importance in receiving care on abscessed teeth.