

Case report: An atypical cause of pneumomediastinum

Ives Hubloue^{1*}, Astrid Verschaeve²

1. ives.hubloue@uzbrussel.be

2. astrid.verschaeve@gmail.com

Correspondence to: Ives Hubloue

*ives.hubloue@uzbrussel.be

Email: ives.hubloue@uzbrussel.be

DOI: 10.24911/SJEMed.72-1711528567



Introduction:

A pneumomediastinum is defined by the presence of free air between mediastinal structures. Here, we present a case of a patient who presented with throat pain and swelling of the neck after a tooth extraction, and was diagnosed with subcutaneous emphysema and a pneumomediastinum.

Case:

A 50-year-old healthy male was admitted to the emergency room with complaints of sore throat and swelling of the neck. On the same day before his admission, the patient underwent a tooth extraction of the mandibular right second molar. The heart rate was 53 beats per minute, body temperature 36,7°C, arterial blood pressure 110/70mmHg and the oxygen saturation 100% in room air. Physical examination showed a swelling in the neck, chest and bilaterally supraclavicular area with subcutaneous crepitus under the skin. The oral examination did not show any abnormalities. The patient was admitted for observation and amoxicillin/clavulanic acid was initiated. The day after, the subcutaneous emphysema was more extensive and a computed tomography was performed. This revealed extensively subcutaneous emphysema and a pneumomediastinum.

Discussion:

A pneumomediastinum is a possibly life-threatening complication after dental procedures. The use of high-speed air turbine drills during tooth extractions is considered in literature to be related to the majority of pneumomediastinum cases. The high-pressured air dissects the soft tissues starting from the impaired dento-alveolar membrane. Contaminated fluid and air can reach the mediastinum and lead to mediastinitis. Symptoms can range from neck swelling and throat pain to retrosternal pain and shortness of breath. Air seen in mediastinum in radiologic examination is diagnostic. The treatment of subcutaneous and mediastinal emphysema is usually conservative, but broad spectrum antibiotics are used to prevent mediastinitis.

Conclusion:

A pneumomediastinum is a rare and life-threatening complication after dental procedures. It should be kept in mind if a patient present with atypical symptoms after dental procedures.