EUSEM 2018 GLASGOW, 8-12 SEPTEMBER
THE EUROPEAN EMERGENCY MEDICINE CONGRESS
EUSEM EUROPEAN SOCIETY FOR EMERGENCY MEDICINE

A swollen tongue, a lung mass and a hole in the trachea – Case report

Ahmed Ali, Elromyasa Mohammed
Royal Bolton Hospital. ahmed.ali7@nhs.net

Case presentation

58 year old male self presented to the emergency department with 3 hours of tongue swelling and "talking funny". Earlier that day he was started with a second course of Clarithromycin by his primary physician for a probable chest infection. He was speaking in full sentences and had no stridor. His past medical history was mild asthma and hypertension for which he has been on Ramipril for the last 5 years. He is a smoker of 40 pack year and has no known allergies. He has no family history of similar condition.

Physical examination revealed an apyrexial patient with tachycardia of 118, BP 148/79, with no respiratory distress. He has no stridor, no wheeze and no urticarial rash. His tongue had an asymmetrical swelling predominantly on the left side (Figure 1). He was put on high flow oxygen and received IV Hydrocortisone, IV Chlorphenamine, a bolus of IV fluid and adrenaline nebulisers.

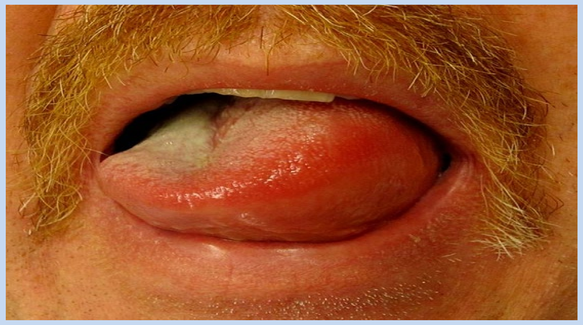

Figure 1: Angioedema identical to the patient presentation
Obtained from: http://dynamicnaturesite.blogspot.co.uk/

Over the following 2 hours the patient's tongue got more swollen and a nasal scope by ENT showed a swollen epiglottis which was not erythematous. The patient was taken to theatre for percutaneous tracheostomy. Blood studies including mast cell tryptase and complements were unremarkable.
A routine chest x-ray was performed in the emergency department and showed a left hilar mass (Figure 2). Patient was decannulated 3 days later and discharged home after stopping Ramipril. An outpatient CT-Thorax confirmed a 7cm left hilar mass, likely non-small cell lung cancer T4 N0 M0. The patient was scheduled for MDT in 2 weeks.

Discussion

Angioedema is believed to be the second most common allergy-related cause for hospitalisation after asthma. It is a self-limited, localized swelling of the skin or mucosal tissues that results from extravasation of fluid into the interstitium due to a loss of vascular integrity. In comparison to other types of oedema it occurs in a short time (minutes to hours), resolve over hours to days, asymmetrical and usually doesn't involve gravity-dependent areas. Angioedema may occur in isolation, accompanied by urticaria, or as a component of anaphylaxis. The causes of angioedema can be divided into mast cell-medicated, bradykinin-medicated and unknown mechanism. Up to 38% of angioedema is of unknown aetiology. On the other hand 20% of allergic reactions have no recognisable skin manifestations.

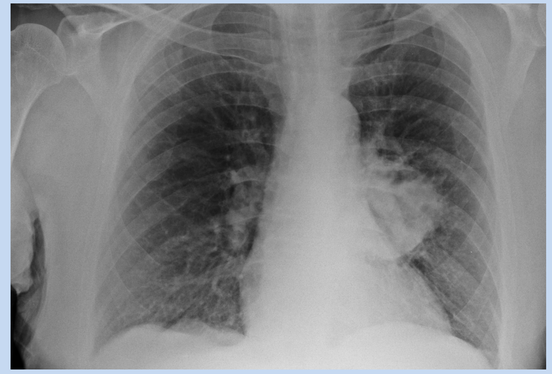

Figure 2: Patient chest x-ray showing left hilar mass 7cm in diameter

This case reflects many aspects of the challenges facing emergency physicians in treating patients with angioedema. While the diagnosis eventually was ACE-I related angioedema, other findings in history and examination made the diagnosis and initial management less clear.

Conclusion

The management of non-histamine angioedema is lacking consensus. Nonetheless, familiarity of the emergency physician in treating angioedema is imperative. The reader should consider the following questions:

- Would you have used Icatibant for this patient?
- Do you know where are the bradykinin-receptor antagonist (Icatibant) and C1-esterase inhibitor concentrate in your department?
- Are you familiar with your department's surgical airway kit?