Adenocarcinoma: not all that wheezes is asthma

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DESCRIPTION

A 46-year-old non-smoking, mildly asthmatic woman presented with a 2-day history of breathlessness and cough. Examination revealed a tachypnoea and bilateral expiratory wheeze. Arterial blood gas analysis showed a type 1 respiratory failure, chest x-ray showed patchy consolidation at the right base.

She was treated for exacerbation of asthma and right-sided pneumonia.

The patient subsequently developed worsening respiratory failure, was intubated and taken to intensive care unit.

After a short period of intubation, she was extubated and had severe coughing and haemoptysis. Suspecting pulmonary embolism a CT pulmonary angiogram was undertaken which showed a mass in the trachea (figure 1A,B). After re-intubation, bronchoscopy revealed a pulsatile mass in the lower third of the trachea, this occupied approximately 80% of the tracheal diameter (figure 1C).

She was transferred to a specialist centre, where she underwent cryotherapy. The histology was adenocarcinoma. She has been referred to the oncologists for chemotherapy.

Primary tumours of the trachea account for less than 0.1% of all tumours and are commonly misdiagnosed as asthma or chronic lung disease.¹

Squamous cell carcinoma and adenoid cystic carcinoma being the most common histological diagnosis for primary airway neoplasms accounting for two-thirds of all tracheal malignancy.² CT is the most useful imaging modality, allowing visualisation

of tumour and any invasion into surrounding structures. Thereafter bronchoscopy allows for tissue diagnosis and for assessment of surgical resectability of such a lesion.³

Learning points

- ▶ Wheeze is characteristically heard in abnormally narrow or compressed airways, asthmatic wheeze will typically respond to asthma exacerbation therapy; where wheeze is difficult to break consider differentials.
- ▶ CT imaging and bronchoscopy can be useful in staging of neoplasms of the upper airways.

Competing interests None.

Patient consent Obtained.

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Figure 1 (A) CT sagittal section of thorax (B) CT coronal section of thorax both (A) and (B) show a foreign body occupying the trachea above the carina. (C) Bronchoscopy of the lower third of the trachea demonstrating the occluding neoplasm, brushings were taken on direct visualisation for histology.

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