A ‘chronic cough’ is defined as a cough lasting longer than 8 weeks. Around 10% of referrals to respiratory outpatient have a chronic cough as the presenting complaint. Coughing is classically described as a protective reflex response to mechanical and chemical airway stimulation and therefore a chronic cough must be adequately investigated. The following case illustrates this. A 63 year old, non smoker, asthmatic man who work in a timber factory as a manual worker had been complaining of an intermittent chronic cough for the past 20 years. He was started on symbicort inhaler by his GP and he noticed a slight improvement since. He presented for the first time to the emergency department with a three days history of productive cough associated with greenish sputum, wheeze, shortness of breath and left sided pleuritic chest pain. On inspection, he was unwell with a temperature of 38 degree celsius. His pulse was 96 beat per minute, regular in rhythm and volume and normal in character. Blood pressure was 110/76. Oxygen saturation was 87% on room air with a respiratory rate of 18 breaths per minute. His peak flow was 200 litres per minute. Chest examination revealed bilateral wheeze with coarse crackles on the left base of his lung.

Chest radiograph showed the presence of left sided pleural effusion with a left lower lobe collapse. Computer tomography scan of the thorax interestingly showed a metal stent like object within the left main bronchus proximal to the collapse and consolidation in the left lower lobe with residual pleural effusion. The presence of this object was later confirmed on bronchoscopy and revealed to be a pigeon foot rim embedded in granulation tissue suggesting that it was in situ for a long period of time. This foreign body was then extracted via rigid bronchoscopy. Retrospectively, the patient had no recollection of foreign body inhalation but admitted to being a pigeon fancier 20 years ago. Chronic cough are elicited via the sensory neuronal dysfunction of vagal afferents. Interestingly, recent trans-neuronal tracing experiments in rodents, have suggested that even below the vocal cords (extra-thoracic trachea), some vagal afferent fibres terminate in the spinal tract trigeminal nucleus. Whether the localisation of sensations of irritation to the throat in patients with chronic cough represents local laryngeal pathology or is referred from the lower airways or other vagally innervated viscera, such as the oesophagus, currently remains unknown.¹

Reflecting on this case showed that the chronic cough of this man was initially thought to be due to his asthma thereby reinforcing the point that a chronic cough always need to be adequately investigated as it can masked sinister pathology such as a foreign body or even malignancy.
References