

Repetitive cough syndrome? (answers on page 54)

Part one

Judith, a lively 2-year old, was brought to the hospital clinic by her mother because she kept on coughing, apparently for no reason, and had been doing so for 3 weeks. She was not feverish, did not appear to be unwell, and apart from the dry, unproductive cough, seemed a happy normal girl. The cough did not seem to be upsetting her, but her mother was worried that it had become so persistent.

- Q1 What passes through your mind when you hear this story? Which of the following statements are likely to ring true in Judith's case?**
- (a) She has a minor pertussis infection, possibly because of a partial immunity after DTP vaccination.
 - (b) This may be an unusual presentation of asthma.
 - (c) She has had a throat infection that has left her with persistent irritation.
 - (d) It could simply be a habit.
 - (e) She may have inhaled a foreign body.
 - (f) Foreign body inhalation can be ruled out because of the long history – it would have led to serious consequences before now.

Part two

On examination she was not dyspnoeic, was not wheezing, and both sides of her chest expanded symmetrically. Auscultation was normal, with no focal signs or abnormal breath sounds. Her throat was normal and not inflamed.

- Q2 What do these negative findings mean for the probable diagnosis?**
- (a) They tend to rule out asthma, foreign body inhalation and infection.
 - (b) The most likely diagnosis is persistent cough of unknown origin that will settle by itself.
 - (c) Pertussis is still a possibility.
 - (d) In a child of this age, foreign body inhalation must be still be in the differential diagnosis.
 - (e) She may be reacting to something in the household atmosphere, such as cigarette smoke.
 - (f) The cause may be digestive, such as acid reflux from the stomach.

Part three

- Q3 Dr Ndebe asked one further question to try to clarify the history. Pick the one he asked from the list below.**
- (a) Has she been in contact with other children, siblings, or playmates, with coughs like this?
 - (b) Is there a smoker in the immediate family?
 - (c) Does she cough during her sleep?
 - (d) Does she get indigestion?
 - (e) Has she had a choking fit recently?

Part four

The answers to Q3 helped a lot. The only positive answer was to (e). Just before the coughing started, her mum remembered, Judith had had a choking spell. It had been so bad that she had taken her to the local clinic, where she had been examined and had a chest X-ray. Her chest had been normal, both on examination and on X-ray. She had been allowed home, and was not asked to return. As her mum had been told there was nothing wrong she hadn't considered it necessary to tell Dr Ndebe about it when she had brought Judith in to see him.

- Q4 What did Dr Ndebe decide to do next? Choose from the following:**
- (a) A further chest X-ray. (b) Flexible bronchoscopy. (c) Rigid bronchoscopy.
 - (d) Prescribe antibiotics. (e) Reassure and send Judith home with no treatment.

Part five

- Q5 Aside from Judith's case (so as not to pre-empt your diagnosis), if this had been a case of foreign body inhalation, which of the following statements are true?**
- (a) It can be ruled out as a cause of chronic cough if there are no physical or X-ray signs of focal lung dysfunction.
 - (b) A choking fit can easily be missed as a starting point as parents may not witness it, and toddlers cannot tell their parents because they are too young to do so.
 - (c) In more than 10% of cases the foreign body is not diagnosed within 30 days.
 - (d) Many foreign bodies are not seen on X-ray and don't cause enough irritation to alter the lung signs or X-ray appearance.
 - (e) Delayed removal of a foreign body can lead to years of chronic cough.