The Wheezy Child

Wheeze is common: approximately 30% wheeze in first 3 years

Wheeze is a subjective description

There are a range of common, and less common causes

Many children grow out of wheeze completely

Many children either have, or later develop Asthma
What is wheeze?

Continuous coarse whistling sound

Some part of the respiratory tree must be narrowed

In one study less than 50% agreement between parents and clinicians re whether wheeze was present

30% of parents use other words to describe wheeze, or use wheeze to describe other sounds

Why do we wheeze?
Why do we wheeze?

Causes of childhood wheeze

- Upper airway disease – adeno-tonsillar hypertrophy, rhinosinusitis, postnasal drip, subglottic stenosis, laryngomalacia, vocal cord paresis.
- Congenital structural bronchial disease - complete cartilage rings, cysts, webs.
- Bronchial/tracheal compression - vascular rings and sling, enlarged cardiac chamber, lymph nodes enlarged by tuberculosis or lymphoma.
- Endobronchial disease - foreign body, tumour.
- Oesophageal/swallowing problems - reflux, in-coordinate swallow, laryngeal cleft, or tracheoesophageal fistula.
- Causes of pulmonary suppuration - cystic fibrosis, primary ciliary dyskinesia, persistent bacterial bronchitis,
- Miscellaneous - bronchopulmonary dysplasia, congenital or acquired tracheomalacia, pulmonary oedema.

Asthma vs Viral Associated Wheeze

Some specialists avoiding the term ‘Asthma’ until older and objective testing is possible

Viral Associated Wheeze (ie only when there is viral infection)

or

Multi-Trigger Wheeze (ie: also occurs in absence of virus)
What do the experts say?
Asthma is more likely if....

Symptoms in absence of virus
Symptoms relate to exertion, excitement, other triggers
Diurnal variability
Other atopy
FHx atopic illness

Not always clear!

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Not every case of asthma will wheeze

BTS/SIGN Asthma Guidelines 2016
Diagnosing asthma in children

- Good history, examination
  - Likely VAW
  - Likely Asthma
  - Other diagnosis more likely

  Trial ICS 4-8w. Review then STOP ICS

  Symptom free: Watchful waiting
  Recurrence of symptoms: restart ICS

  Asthma

Bronchodilators Review!

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Bronchodilators Review!
Diagnosing asthma in children

There is no single diagnostic test for asthma

Asthma comes and goes

Patience and watchful-waiting are essential

Need to explain this to parents – education!
Diagnosing asthma in children

Treating wheeze in preschool children

- No treatment has been shown to prevent progression of preschool wheeze to school age asthma, so treatment is driven solely by current symptoms

- In all but the most severe cases, episodic symptoms should be treated with episodic treatment

- If trials of prophylactic treatment are contemplated, they should be discontinued at the end of a strictly defined time period because many respiratory symptoms remit spontaneously in preschool children

- Prednisolone is not indicated in preschool children with attacks of wheeze who are well enough to remain at home and in many such children, especially those with episodic viral wheeze, who are admitted to hospital

Dr A Bush http://www.bmj.com/content/348/bmj.g315
Further information

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Asthma UK Advice  https://www.asthma.org.uk/advice/
Asthma UK Helpline  0300 222 5800
PCRS-UK Conference  https://pcrs-uk.org/annual-conference
Primary Care Respiratory Academy  http://www.respiratoryacademy.co.uk/