Asthma assessment and management

In children with a high probability of asthma:
- Move straight to a trial of treatment
- Reserve further testing for those with a poor response.

In children with a low probability of asthma:
- Consider more detailed investigation and specialist referral.

In children with an intermediate probability of asthma who can perform spirometry and have evidence of airways obstruction, offer a reversibility test and/or a trial of treatment for a specified period:
- If there is reversibility, or if treatment is beneficial, treat as asthma
- If there is insignificant reversibility, and/or treatment trial is not beneficial, consider tests for alternative conditions.

In children with an intermediate probability of asthma who cannot perform spirometry (mostly under 5s) offer a trial of treatment for a specified period:
- If treatment is beneficial, treat as asthma
- If treatment is not beneficial, stop asthma treatment, and consider tests for alternative conditions and specialist referral.

“...The natural history of wheeze is dependent on age at first presentation. In general, the earlier the onset of wheeze, the better the prognosis. Cohort studies show a break point around two years; most children who present before this age become asymptomatic by mid-childhood.”

Indications for specialist referral:
- Diagnosis unclear or in doubt
- Symptoms present from birth or perinatal lung problem
- Excessive vomiting or passing large amounts of yellow or greenish-streaked stools
- Severe respiratory tract infection
- Persistent wet or productive cough
- Family history of unusual chest disease
- Failure to thrive
- Nasal polyps
- Unexpected clinical findings eg focal signs, abnormal voice or cry, dysphagia, inspiratory stridor
- Failure to respond to conventional treatment (particularly inhaled corticosteroids above 400 micrograms per day or frequent use of steroid tablets)
- Parental anxiety or need for reassurance

Peak expiratory flow monitoring (PEFR) is the simplest form of lung function test in primary care. Click here for a monitoring chart. Should be measured standing up with feet shoulder-width apart, and the best result of three recorded on a diary such as the one available from [https://www.asthma.org.uk/]. Best measured twice a day over 2 weeks when starting a trial of treatment. However probably performs best when monitoring a child’s progress in established asthma rather than as a diagnostic tool. Symptom-based management is better than PEFR.

Suggested management of early weight loss (ie. first few days of life) in clinically well, term, breastfeeding babies:

We have had a few severely anaemic children on our ward recently. 1 in 8 UK toddlers has an Hb of <110g/L, rising to 35% in some impoverished sectors of society. 50% of toddlers have an iron intake below the recommended amount. Even moderately low levels can affect cognitive development and behaviour. Enthusiastic cow’s milk drinking is often to blame. See June 2010 newsletter for a table on recognising and managing iron deficiency.

- http://kidshealth.org/parent/medical/heart/ids.html for sensible information and advice for parents
- NB NHS Lothian’s leaflet on increasing iron in a child’s diet
- Fact sheet on iron deficiency anaemia from [infantntoddlerforum.org.uk]

NB: after their 1st birthday, 3 cups of 120mls/4oz milk is enough per day.