

Paediatric Pearls

(ED update)

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Clinical questions

If a child has a low MCV and is likely to be iron deficient, should I treat with iron even if the Hb is within the normal range?

Measured Haemoglobin (g/dL)	Recommended action
Normal range: 6 months to 5 years 10.5 – 14 g/dL 6 – 12 years 12 – 16g/dL	Dietary advice only ie. no “doorstep” cows’ milk under 1 year, not more than about 500mls/day milk in the over 1s, more iron containing foods (red meat and green vegetables) and Vitamin C containing foods (which helps the absorption of iron)
>10g/dL but less than normal	Dietary advice and consider iron. Sytron (sodium feredetate) 1ml/kg/day in 2-3 divided doses seems to be the most palatable. Toxic in overdose.
7 – 10g/dL	Dietary advice and start iron supplements. Re-measure FBC in 2-3 weeks. Treat with iron for 3 more months after the Hb has normalised to replenish stores.
<7g/dL	Dietary advice, start iron and re-measure FBC in 2-3 days to look for reticulocyte response (should increase ++ once iron started)

In our local population, how do I know it is iron deficiency anaemia and not thalassaemia trait?

	Anaemia of chronic disease	Thal trait (alpha OR beta)	Iron deficiency anaemia	Thal trait + IDA	Haemoglobinopathy
Hb	↓	N / ↓	↓ / ↓ / ↓	↓ / ↓ / ↓	↓ or ↑
MCV	N / ↓	↓ / ↓ / ↓	↓ / ↓ / ↓	↓ / ↓ / ↓	↓ or ↑
MCH	N / ↓	↓ / ↓ / ↓	↓ / ↓ / ↓	↓ / ↓ / ↓	↓ or ↑
RBC	↓	N / ↑	N / ↓	N / ↑	↓ or ↑
RDW	N	N	↑	↑	↓ or ↑

Therefore a child of 6 months or older with hypochromic, microcytic anaemia with an increased RDW has presumed iron deficiency.

Investigation results in paediatric A and E

Blood tests: Please put your bleep number or an extension number on the form. The lab technicians can then contact you if the sample is haemolysed or clotted. 80% of forms have no contact number on them!

Urine and swabs: Please put the patient’s name sticker in the paediatric SHO job diary on the date you expect a result to be back. Please include a few details of the problem, management so far, plan and a parental phone number. The paediatric juniors will then look them up and effect an appropriate plan. Jobs need to be crossed out once they have been done.

FROM THE LITERATURE: Duration of antibiotics for streptococcal sore throat

30-40% of pharyngotonsillitis is caused by bacteria with group A β-haemolytic streptococcus (GABHS) being the most common pathogen. Antibiotics are indicated in GABHS; they shorten the clinical course of the illness, reduce the rate of transmission and prevent complications such as peritonsillar abscess and acute rheumatic fever^{1,3}. A Cochrane review last year suggested a 3-6 day course of penicillin should be safe in countries with low rates of rheumatic fever as it had comparable efficacy to the 10 day course but the authors advise caution in low-income countries where rheumatic fever remains an endemic disease² and clinical practice has not changed since the publication of this review³. Here at Whipps Cross we still recommend the full 10 day course of Penicillin V (erythromycin if penicillin allergic) in proven streptococcal tonsillitis. The paediatric SHOs will chase throat swab results if you put a patient sticker in their job book in paediatric A and E and can organise further antibiotics if necessary.

1. Brook et al. Management of group A beta-haemolytic streptococcal pharyngotonsillitis in children. *J Fam Pract* 2006; 55(12): S1-11

2. Altamimi S et al. Short versus standard duration antibiotic therapy for acute streptococcal pharyngitis in children. *Cochrane Database Syst rev* 2009; 21(1): CD004872 <http://www2.cochrane.org/reviews/en/ab004872.html>

3. Baltimore. Re-evaluation of antibiotic treatment of streptococcal pharyngitis. *Curr Opin Pediatr* 2010 Feb; 22(1):77-82

This month’s featured NICE guideline: *Diagnosis and management of idiopathic childhood constipation in primary and secondary care (CG99 Publ. May 2010)*

5-30% of the paediatric population suffer from constipation which makes this guideline **ESSENTIAL READING** for any doctor or nurse looking after children!

Quick reference guide (16 pages) at www.nice.org.uk/nicemedia/live/12993/48754/48754.pdf
Parental guide (8 pages) available at www.nice.org.uk/nicemedia/live/12993/48752/48752.pdf
“Choose your poo” Bristol stool chart for children available at www.nursingtimes.net/Binaries/0-4-1/4-1646210.pdf

There are 11 key priorities for implementation (denoted by “KPI” in the text):

1. Establish the **diagnosis**. 2 or more symptoms from Table 1 of the Quick Ref Guide (QRG) which include <3 stools (Bristol stool type 3 or 4) per week, hard, large, often smelly stools, bleeding, straining, previous history of constipation
2. Take a targeted **history to identify or exclude the red flags** listed in Table 2 of the QRG eg. meconium not passed within the first 48 hours of life, problem reported from birth, neurological problems
3. Perform a **physical examination** to identify or exclude red flags listed in Table 3 of QRG eg. gross abdominal distension, abnormal looking anus (anterior position?), abnormalities of skin over lumbar sacral region, abnormal lower limb neurology
4. Reassure those with a diagnosis of idiopathic constipation that there is a treatment but **resolution of the condition may take many months**
5. Use a combination of history and examination to diagnose **faecal impaction** (overflow soiling and/or faecal mass palpable per abdomen)
6. Only perform a **rectal examination if competent** to interpret features of anatomical abnormalities or Hirschsprung’s disease
7. Prescribe an **oral medication** regimen. First line treatment is Movicol, the only licensed polyethylene glycol 3350 and electrolytes in the UK. Use an escalating dosing regimen (Table 4 of the QRG. NB the doses are not exactly the same as the BNFC). If disimpaction not achieved after 2 weeks, add in a stimulant laxative (eg. senna).
8. Continue **maintenance treatment with Movicol** (try half the disimpaction dose) until toilet training is well established and regular passage of Bristol stool type 3 or 4.
9. Do not use **dietary interventions** alone as first line treatment
10. Advise a balanced diet with **adequate fluid** and fibre
11. Establish a **direct point of contact** for on-going support for the family. Can be the GP, practice or school nurse for example.