

Paediatric Pearls

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Previous editions are all available at www.paediatricpearls.co.uk

The MAP Guideline publ. 2013 to managing cow's milk protein allergy in Primary Care



The definitive guide with algorithms on diagnosis, investigations, management, different types of milk and reintroducing milk at home (the Milk Ladder). Based on the NICE guideline on food allergy but more practical! [Click here.](#)



Do not do recommendations from NICE (see August 2014 for explanation)

From [Constipation in children and young people](#) (CG99) Published May 2010:

- Do not use rectal medications for disimpaction unless all oral medications have failed and only if the child or young person and their family consent.
- Do not use a plain abdominal radiograph to make a diagnosis of idiopathic constipation.
- Do not use abdominal ultrasound to make a diagnosis of idiopathic constipation.
- Do not use dietary interventions alone as first-line treatment for idiopathic constipation.

"From the literature" by Dr Tom Waterfield: Wheeze and Intermittent Treatment (WAIT) Trial

With winter fast approaching paediatricians, GPs and ED doctors will be bracing themselves for the inevitable surge in children presenting with wheeze. The WAIT study set out to determine if montelukast could be used intermittently by parents to reduce unscheduled attendances with wheeze. 1358 children aged between 10 months and 5 years over a 3 year period across 62 sites in the UK were recruited. All of the children had physician diagnosed wheeze on at least two occasions. The study set out to determine if giving montelukast to children at the onset of cold or wheeze symptoms over a 12 month period could reduce unscheduled attendances to hospital. **This double blinded, multicentre randomised control study found that intermittent montelukast usage did not reduce hospital attendance.** The authors also performed a meta-analysis of existing studies investigating the intermittent usage of montelukast for wheeze and again found no evidence of a benefit.

Interestingly however, the group also performed subgroup analysis based on genotyping for the arachidonate 5-lipoxygenase (ALOX5) gene promoter and found that **a subgroup of children in the WAIT study did demonstrate a statistically significant reduction in unscheduled medical attendances** for wheezing episodes.

So where does this leave us?

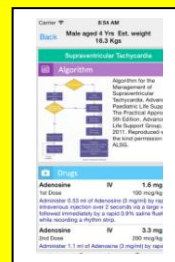
For this winter this study doesn't offer any additional evidence for the use of montelukast in preventing hospital attendances but there is hope for the future. Further work to better understand how genotyping could be used to identify montelukast responsive children could result in targeted therapy.

Ref: Nwokoro C, Pandya H, Turner S, Eldridge S, Griffiths CJ, Vulliamy T, et al. Intermittent montelukast in children aged 10 months to 5 years with wheeze (WAIT trial): a multicentre, randomised, placebo-controlled trial. *Lancet Respiratory Medicine*. 2014;2(10):796-803.

Dr Anna Morgan (Barts Health ED consultant) shares some of her favourite apps and podcasts with us over the next few months:



Pedbone - this is a very useful App for anyone who looks at paediatric skeletal radiographs. It provides a database of representative x-rays for children of different ages. Excellent to use as a final check before discharging a child who you think has a normal x-ray. It is especially useful for the notoriously difficult paediatric elbow. Available from Apple Apps. Rated 4/5



Paediatric Emergencies - Based on guidelines from APLS, CEM, NICE and more this App contains a lot of useful information which is invaluable to have at your fingertips when confronted with an acutely ill child. It includes treatment algorithms for conditions such as anaphylaxis, status epilepticus, meningitis, burns and raised ICP. On the down side those with less than perfect vision may find some of the text hard to read on a phone. Available from Apple Apps Rated 4/5

Please feel free to leave your own suggestions on the blog!

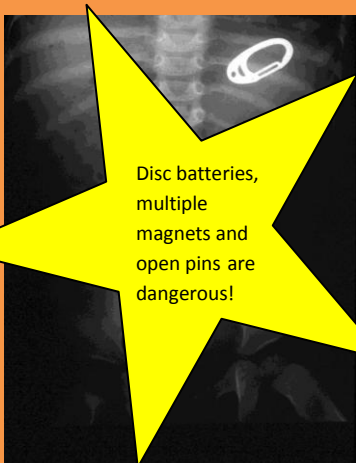
Reply from WAIT study principal investigator and Barts Health respiratory paediatrician, Dr Chin Nwokoro:

Effective treatment for preschool wheezing children remains elusive. Oral steroids do not reduce hospital admissions or length of stay (1, 2) and may cause harm. Preschool wheezers are predominantly well between attacks and chronic inhaled steroids are not justified in the absence of very frequent or clinically severe episodes. Montelukast shows promise as the only leukotriene receptor antagonist licensed in children, especially given previous work showing an increase in leukotriene axis activation during acute wheezing episodes(3). This study did not show evidence of global benefit in this age group, and the genetic subgroup effect did not in truth meet significance when the p-value for interaction is considered. The data hint at rather than firmly identify a responsive subgroup, and furthermore no link is shown between baseline leukotriene status and montelukast response(4). The success of *ivacaftor* in CF patients with a gating mutation is evidence that genotype-guided therapy can be transformative(5), unfortunately that evidence is lacking here. The ERS taskforce(6) suggests a role for prophylactic therapy in preschool viral wheezers with severe or frequent attacks and it is here, in the absence of steroid-modifiable pathology, where 'preloading' with regular (but not on this evidence intermittent) montelukast may prove of benefit.

References at <http://www.paediatricpearls.co.uk/2014/11/wait-study/>

Timing of endoscopic removal of ingested foreign bodies (FB)

- with thanks to Dr Warren Hyer, paediatric gastroenterologist at Northwick Park and Chelsea and Westminster Hospitals



Disc batteries, multiple magnets and open pins are dangerous!

Localization	Type of FB	Timing of endoscopy
Crycopharinx/impact on stenosis	Any type	Emergency
Oesophagus	Batteries/dangerous or toxic-containing FB	Urgency
Oesophagus	Harmless FB, round-shaped—symptomatic patient	Urgency
Oesophagus	Harmless FB—asymptomatic patient	Delayed urgency, after some hours and new X-ray
Stomach	Dangerous/toxic-containing FB	Urgency
Stomach	Batteries	Delayed urgency max 48 hours
Stomach	Harmless FB in asymptomatic patient	Election (discharge and first X-ray 4 weeks later, if elimination by stools failed)
Duodenum	Dangerous FB	Urgency
Duodenum	Harmless FB	No indication
Any location	Lead containing DB	Urgency