Paediatric Pearls

July 2014

Put together by: Dr Julia Thomson, Consultant Paediatrician, julia.thomson@bartshealth.nhs.uk

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

Heart rates to be concerned about:

Source: NICE fever guideline 2013

>160 beats/minute, if aged <12 months
>150 beats/minute, if aged 12–24 months
>140 beats/minute, if aged 2–5 years

Respiratory rates to be concerned about:

Respiratory Rate >50 breaths/ minute, if aged 6–12 months
Respiratory Rate >40 breaths/ minute, if aged >12 months

Parents think that height of temperature is important. NICE doesn't (once they're over 6 months of age). Should parents be taught how to measure their feverish child's heart and respiratory rate? Click here for a guide for parents on how to do it.

Headache management by type

Cluster headache

Diagnosis: ≥ 5 attacks of severe unilateral headache lasting 15-180 mins, from every other day to 8 per day and associated with ipsilateral eye and nose watering, eyelid and/or forehead swelling.

Fortunately, rare in children. Very difficult to treat effectively. High flow O_2 if possible and s/c triptan.

Support group https://ouchuk.org/.

Migraine

Early prevention – rest and avoid excessive noise, light, caffeine and nitrites (found in some Chinese food)
Pain relief and anti-emetic early
- Ibuprofen 7.5-10mg/kg dose
- Paracetamol up to 20mg/kg/dose
- A triptan (see BNFc) for 2 days a week only

Consider prophylaxis for 8-12/52
- Pizotifen (little evidence)
- Propanolol and topiramate (side effects++)

Parent information leaflet here.

Tension headache

Early prevention – lifestyle modification (sleep, posture, stress). Advise about medication overuse.
Pain relief on no more than 2 days per week:
- Ibuprofen 7.5-10mg/kg dose
- Paracetamol up to 20mg/kg/dose

Professional reference incl. reminder of important points in a headache history.

Medication overuse

Early prevention – only use analgesics on 2 days a week (risk of medication overuse headache goes up if used for >10-15 days/month for 3/12)
Stop all medications immediately and symptoms should improve within 2/12. If they don't, need to reconsider diagnosis.

Patient information leaflet here

Red flag reminder: personality change, academic decline, visual difficulties, neurological signs and symptoms, vomiting, faltering growth, abnormal puberty, recent onset of severe headache or change in normal pattern of headaches.

Headache course info at www.bpna.org.uk – highly recommended.

National Screening Committee (NSC)

At its meeting on 12 March 2014, the UK NSC recommended piloting the use of the pulse oximetry test to evaluate the potential benefits of its use as a new screening test for congenital heart disease. The pilot sites have not yet been announced. Congenital heart defects (CHD) account for up to 40% of all deaths from congenital defects and 3-7.5% of infant deaths in the developed world (Lloyd 2003). The incidence of critical (ie. life threatening) CHD is 1.2-1.7 per 1000 live births (Lowell 2012) and detecting it earlier is likely to be better for long term outcomes.

Currently in the UK we screen for CHD at the 20/40 scan and baby checks at birth and at 6-8/52 (see http://cpd.screening.nhs.uk/timeline for a nice visual guide to all current UK antenatal and newborn screening tests). It is estimated that adding pulse oximetry to these checks will allow early diagnosis of 92% of critical CHD.

But it won't pick up the most common causes of life-threatening CHD, namely critical aortic stenosis and coarctation. Many units have started measuring oxygen saturations in all their newborns already but do we all have the resources to safely echo all those with oxygen saturations ≤ 94%? What of the false positives? What will this do to length of stay on the postnatal wards? And to parental worry levels?

Click here to read the on-going debate and results of the consultation on the proposed pilot of newborn pulse oximetry screening.

Sick and tired - the truth about infantile reflux (GOR)

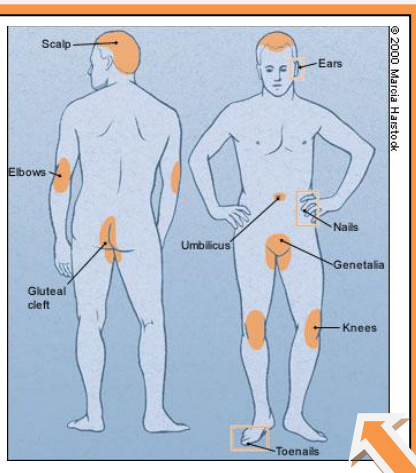
By Dr Tom Waterfield

Tom writes: *"We have all had that difficult conversation regarding "reflux" when a tired parent has come to us with their "sicky child" and an unshakeable belief that their baby has GOR. There is often enormous pressure to provide a solution but how do we decide which children need treatment and what treatments should we use? In view of the recent concerns regarding the use of domperidone I have chosen to review the current evidence base for the management of this common problem."*

Click here for his short review of the North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition (NASPGHAN) and the European Society for Pediatric Gastroenterology, Hepatology, and Nutrition (ESPGHAN) 2009 guideline.

Salient points:

- Try to avoid treating simple GOR. Reassurance is often all that is required. Before starting any treatment have a frank discussion regarding the risks and benefits.
- Physiological gastro-oesophageal reflux (GOR) is common; around 50% of healthy infants will display symptoms of GOR. These "happy spitters" will be gaining weight and healthy.
- Any faltering growth is unlikely to be due to GOR and alternate diagnoses such as cow's milk protein allergy should be considered.
- If symptoms are severe and persistent and an alternate diagnosis is unlikely then consider thickened feeds and "tummy time" as a first line treatment. If this is unsuccessful then consider antacids but be aware that the evidence base for these treatments is limited and they are being used off license. Prokinetics play no part in managing GORD in infants and domperidone may be cardiotoxic.



Psoriasis in children by Dr Andrew Lock

- A chronic condition affecting 2-3% of the UK population
- Strong genetic component, significant psychological impact
- girls > boys (equal in adults)
- Improves in sunlight in 90%.
- 5% develop psoriatic arthritis
- Lesions: well defined, red, scaly plaques (less obvious in flexural psoriasis)
- Exacerbating factors: trauma (koebnerisation), illness (strep throat), obesity, drugs (oral steroids, antimalarials, NSAIDs)

Distribution is helpful when diagnosis uncertain. http://www.aafp.org/afp/2000/0201/afp20000201p725-f1.jpg
Several patterns can occur. Most common in children are flexural, guttate, and facial psoriasis: http://www.dermnetnz.org/scaly/paediatric-psoriasis.html

Topical treatments. Addition of emollients (to reduce scale/fissuring) and medicated shampoos can be helpful. Link to NICE treatment algorithm (see algorithm 5): http://www.nice.org.uk/guidance/cg153/resources/cg153-psoriasis-algorithm2
Always consider the differential: fungal infection (if localised), pityriasis rosea (herald patch?), eczema (less well defined, distribution), seborrhoeic dermatitis

OTHER LINKS

PCDS link: Includes good pictures and links to BAD information leaflet http://www.pcds.org.uk/clinical-guidance/psoriasis-an-overview
"Psoriasis in children" leaflet (psoriasis association): http://www.psoriasis-association.org.uk/silo/files/No5%20psoriasis%20in%20children.pdf

Up to date handout of **breastfeeding drop in groups in Waltham Forest here.**

What is Colic?

Paroxysmal, uncontrollable crying in an otherwise healthy infant less than 3 months of age, with more than 3 hours of crying per day in more than 3 days per week and for more than 3 weeks.
New West Suffolk guideline and differentials uploaded here.
Comprehensive Paediatric Pearls article from 2011 here.