Paediatric Pearls

by Dr Julia Thomson, Paediatrician

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Monthly paediatric update newsletter for all health professionals working with children – put together by Dr Julia Thomson, Paediatric Consultant at Homerton University Hospital, London, UK. Housed at www.paediatricpearls.co.uk where comments and requests are welcome!

Thank you to Dr Tammy Rothenberg for keeping asthma on the agenda. It's that time of year when asthma admissions and attendances to EDs spike. This year, NHSE London, to help improve key issues around basic children's asthma care, held the #askaboutasthma campaign. There are 3 specific and simple messages to this public health initiative. Each child and young person with asthma should:

1. have an asthma management plan
2. be able to use their inhalers effectively
3. have an annual asthma review

There are several useful links, posters and videos at https://www.healthylondon.org/resource/askaboutasthma-communications-toolkit/ . And for your surgery/ED wall: https://www.healthylondon.org/wp-content/uploads/2017/09/Ask-About-Asthma-General-Poster.pdf

LESSONS FROM THE FRONT LINE: fever for > 5 days? Think Kawasaki…

Kawasaki Disease Symptoms

KD is the UK's No. 1 cause of acquired heart disease in childhood. We need to treat earlier.

Kawasaki Disease has a range of symptoms including a characteristic and distinctively persistent high fever for five days or more, rash, bloodshot eyes, "strawberry" tongue, cracked, dry lips, redness of the fingers and toes. If a child has a **persistent fever together with two or more** of these symptoms, **THINK** Kawasaki Disease.

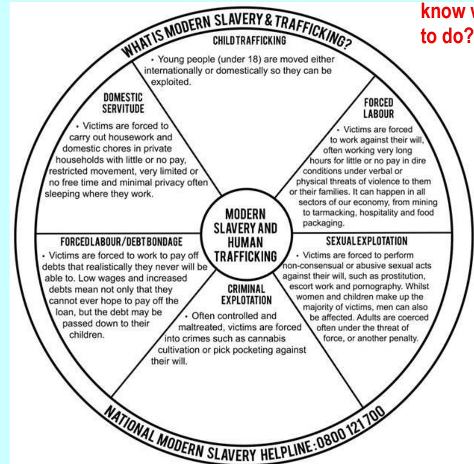
https://www.societi.org.uk/ is the UK Foundation for Kawasaki Disease. There are lots of resources for clinicians and families on its website. Links to national guidelines and current research are housed at https://www.societi.org.uk/for-clinicians/research-links/.

Current (2013) full text UK guidelines available in full and in algorithm form here.

The DoH document, https://www.gov.uk/government/publications/childhood-obesity-a-plan-for-action/childhood-obesity-a-plan-for-action asks us to mention weight to families at every opportunity and we all know how time consuming or potentially alienating that can be. How can health professionals get the balance right? What resources are out there to give to families in a busy clinic or surgery once weight has been mentioned? Look out for next month's Paediatric Pearls newsletter. With input from physios, dietitians, teenagers and the eating disorder team's psychiatrist, we are currently putting the final touches to a Healthy Living handout for families which I hope you will all find helpful. Work out your own BMI here.

Child and adult safeguarding is the responsibility of all of us. Eg. a front line healthcare worker may be the only person to have unsupervised access to a victim of modern slavery.

Would you know what to do?



Can't remember how it might present? Who to refer to? Other types of abuse? All the answers are available in one place on an NHS app http://www.myguideapps.com/nhs_safeguarding/default/. Install it now for all your child, adult and indeed staff, safeguarding needs.

Child safeguarding CPD requirements: The full, intercollegiate document of who needs what level of training and the requirements for ongoing CPD is at: https://www.rcpch.ac.uk/sites/default/files/Safeguarding_Children_-_Roles_and_Competences_for_Healthcare_Staff._Third_Edition_March_2014.pdf (due for update this year).

Level 3 core: adult ED practitioners (8 hours of relevant CPD within a year of appointment, followed by 6 hours refresher training over each period of 3 years (or 2 hours per year))

Level 3 requiring specialist knowledge and skill: GPs, HVs, paediatricians, children's nurses, children's ED practitioners, midwives, allied health professionals working predominantly with children (16 hours of relevant CPD within a year of appointment, followed by a minimum 2-16 hours refresher training over each 3 year period)

All staff working in a healthcare setting need **Level 1** training, all clinical *and non-clinical* staff in regular contact with children (eg. GP receptionists) need **Level 2**. http://www.e-lfh.org.uk/home/ is a good place to start for on-line basic training. Contact your local designated or named safeguarding nurse or doctor if you think you or your staff are behind on these training requirements. Keep a log of your on-line and face-to-face training, attendance at strategy meetings, writing a court report, safeguarding audit etc. as evidence of your learning. Reflections on what you read in the Paediatric Pearls newsletters on different aspects of child safeguarding and following the links we provide would also count. Modern slavery this month, ACEs in August and on-line safety coming up in October.

Sepsis versus Fever

It is obviously very important not to miss the tell-tale signs of sepsis in a child BUT how do we differentiate safely between "sepsis" and "fever" in the Emergency Department without measuring a lactate in every child with a high temperature?

HOW TO SPOT SEPSIS IN CHILDREN

If your child is unwell with either a fever or very low temperature (or has had a fever in the last 24 hours), call 999 and just ask: could it be sepsis?

A child may have sepsis if he or she:

1. Is breathing very fast
2. Has a 'fit' or convulsion
3. Looks mottled, bluish, or pale
4. Has a rash that does not fade when you press it
5. Is very lethargic or difficult to wake
6. Feels abnormally cold to touch

A child under 5 may have sepsis if he or she:

1. Is not feeding
2. Is vomiting repeatedly
3. Has not passed urine for 12 hours

From the UK Sepsis Trust

If in doubt, ask a senior clinician "Could this be Sepsis?"

NICE National Institute for Health and Care Excellence

Traffic light system for identifying risk of serious illness*

	Green – low risk	Amber – intermediate risk	Red – high risk
Colour (of skin, lips or tongue)	• Normal colour	• Pallor reported by parent/carer	• Pale/mottled/ashen/blue
Activity	• Responds normally to social cues • Content/smiles • Stays awake or awakens quickly • Strong normal cry/not crying	• Not responding normally to social cues • No smile • Wakes only with prolonged stimulation • Decreased activity	• No response to social cues • Appears ill to a healthcare professional • Does not wake or if roused does not stay awake • Weak, high-pitched or continuous cry
Respiratory		• Nasal flaring • Tachypnoea: – RR >50 breaths/minute, age 6–12 months – RR >40 breaths/minute, age >12 months • Oxygen saturation ≤95% in air • Crackles in the chest	• Grunting • Tachypnoea: RR >60 breaths/minute • Moderate or severe chest indrawing
Circulation and hydration	• Normal skin and eyes • Moist mucous membranes	• Tachycardia: – >160 beats/minute, age <12 months – >150 beats/minute, age 12–24 months – >140 beats/minute, age 2–5 years • CRT ≥3 seconds • Dry mucous membranes • Poor feeding in infants • Reduced urine output	• Reduced skin turgor
Other	• None of the amber or red symptoms or signs	• Age 3–6 months, temperature ≥39°C • Fever for ≥5 days • Rigors • Swelling of a limb or joint • Non-weight bearing limb/not using an extremity	• Age <3 months, temperature ≥38°C • Non-blanching rash • Bulging fontanelle • Neck stiffness • Status epilepticus • Focal neurological signs • Focal seizures

CRT, capillary refill time; RR, respiratory rate

*** This traffic light table should be used in conjunction with the recommendations in the guideline on investigations and initial management in children with fever. See http://guidance.nice.org.uk/CG160 (update of NICE clinical guideline 47).***

Never be complacent about tachycardia

Take a look at these sensible on-line resources:

Fever in children - red flag symptoms (CPD points available): https://www.gponline.com/fever-children-red-flag-symptoms/paediatrics/article/1427362. (Log in required.)

And for families: https://patient.info/health/fever-in-children-high-temperature