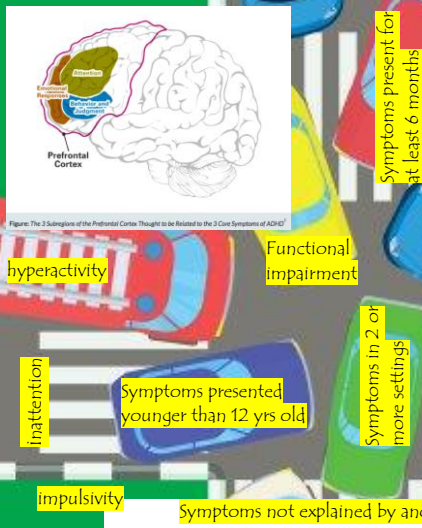


Paediatric Pearls

by Dr Julia Thomson, Paediatrician

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Bimonthly 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!



Attention Deficity Hyperactivity Disorder (ADHD); RED FLAGS AND RISK FACTORS

with thanks to Dr Monika Bajaj, neurodevelopmental paediatrician.

“ADHD does not make a person different. It makes them exceptional.” <https://www.bornbetotheadhd.co.uk/>

- ADHD is a chronic lifelong disorder of self-regulation. >70-80% still have symptoms in adolescence and >50% have persistent problems as adults.
- Up to 30% of children are depressed and up to half of girls with ADHD may attempt self-harm
- Children with untreated ADHD are >5 times more likely to participate in fights and underachieve at school
- Adults with ADHD are 9 times more likely to end up in prison, have financial problems and be fired from a job.
- Adults with ADHD have a higher mortality with a higher risk of driving accidents, substance abuse, obesity and co-morbid problems ([Dalsgaard et al. Lancet 2015, May;385\(9983\):2190-6](https://doi.org/10.1016/j.lan.2015.05.033))

ADHD can be treated ≥ 5yrs. <https://www.nice.org.uk/guidance/ng87>
Click here for more information and resources from Monika.

FROM THE FRONT LINE: Does that 14-year-old with chest pain have a history of Kawasaki disease (KD)?

The incidence of KD increased 4-fold in the UK between 2006 and 2019, making it the most common cause of acquired heart disease in the western world. Dr Vicky Agunloye, senior paediatric registrar, has been [listening](#) to a BMJ Heart podcast with Professor Tulloh, Bristol paediatric cardiologist and world expert on KD.

Ischaemic symptoms normally develop 10-15 years after the initial KD in children who have coronary artery aneurysms (CAA) ie. in the 11-21 year olds.

4% of young adults presenting with non-ST-elevation myocardial infarction (NSTEMI) have KD induced coronary artery disease.

17-20% of children with KD will get CAA despite treatment. Early recognition and treatment bring the risk down to 5%. Treatment by day 6 of the illness protects against CAA. Leave it to day 11, and they nearly all have CAA.

80% of cases of KD are in children younger than 5yrs. The highest risk group for CAA are the under 1s.

Diagnostic criteria:

<https://www.ahajournals.org/doi/10.1161/01.CIR.103.2.335>
<https://soundcloud.com/bmjpodcasts/how-not-to-miss-kawasaki>

Updated Milk Allergy in Primary Care (MAP) Guideline 2019: <https://gpifn.org.uk/imap/>



Planned reintroduction of cows milk protein is now a NICE Food Allergy [Quality Standard](#), essential for diagnosis

Healthcare Professional Factsheet - on the use of iMAP guideline

2-3% of infants have proven milk allergy – i.e. 97-98% of infants do not have milk allergy¹

ALL NEWBORN BABIES REFLUX NOT ALL UNSETTLED BABIES WITH A BIT OF DRY SKIN HAVE A COWS' MILK ALLERGY

The original motivation for the guideline in 2013 was a reported delayed diagnosis of non IgE mediated milk allergy. Now the concern is more one of *overdiagnosis*.

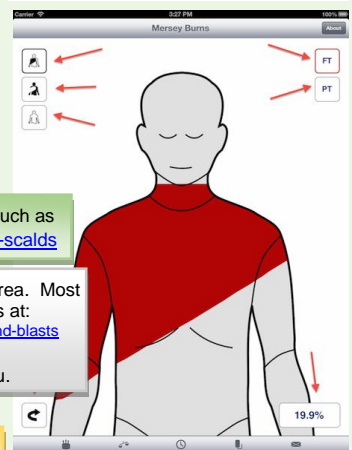
1. CMPA only affects 2% of babies but lots of babies have some of the clinical signs and symptoms of cows milk protein allergy
2. Overdiagnosis has a negative impact on breastfeeding
3. There are professional concerns over industry's influence on the guidelines

This is the background on which the MAP guideline was updated in 2019. All the links you need for the full guideline, the “milk ladder” and its recipes, names of extensively hydrolysed formulae, NICE's clinical knowledge summary, algorithms for management of CMPA in primary care including reintroduction of milk without the need for allergy referrals is available from the [GP infant feeding](#) website above.

Worldwide, 15,000 children < 5 yrs old die on an average day = 5.4 million in 2017. The slightly better news is that this was half the 11.8 million who died in 1990. The major causes of death remained the same:

- Infectious diseases (45%)
 - Lower respiratory tract infections (15%)
 - Preterm births / neonatal disorders (12%)
 - Diarrhoeal diseases (10%)
 - Congenital defects (9%)
- Source: <https://ourworldindata.org/what-are-children-dying-from-and-what-can-we-do-about-it>

<https://merseyburns.com/manual/v1.6.1/>



A father rushes into A&E holding his 2-year-old child who has just pulled a freshly brewed, black coffee over his face and torso. The child is screaming, and the father is panicking; you feel your own heart begin to race. Where to begin?

Dr Cate Luce, paediatric registrar with an interest in emergency medicine at Homerton University Hospital presents a systematic ABCDE approach to burns in children.

A is the airway compromised? Consider in facial burns, smoke inhalation, dyspnoea, hoarseness, drooling, stridor, respiratory distress. For more information: <https://dontforgetthebubbles.com/picu-qa-airway-injuries-due-burns/>

B basic first aid Run cold water on affected area for at least 20 minutes. Worth doing up to 3 hours after the burn. Use fast-acting pain relief such as intranasal diamorphine in the ED. GPs and parents should give paracetamol and ibuprofen. <https://cks.nice.org.uk/burns-and-scalds>

C calculate the percentage total body surface area (TBSA) The palmar aspect of a child's hand is 1% of their surface area. Most people overestimate the %TBSA. Lund and Browder charts at: <https://em3.org.uk/foamed/25/10/2015/remember-remember-burns-and-blasts> Or download the Mersey burns app and get colouring in. It calculates the percentage burn and fluid requirement for you.

D discuss with burns centre >1%TBSA, chemical, electrical, inhalational, non-accidental, serious co-morbidity. See <https://www.lsebn.nhs.uk/website/X13911/files/LSEBN%20Burns%20Referral%20Criteria.pdf>

D disabilities and complications Infection, scarring, toxic shock syndrome (<https://www.nhs.uk/conditions/toxic-shock-syndrome/>) – beware the child presenting with a fever 3 days after even a fairly minor burn.

E external factors Consider the child's immunisation status – burns are tetanus prone. Think: could this be a result of neglect or physical abuse? Always alert the child's health visitor even if you feel it was accidental and are not going to involve children's social care. Look up: https://www.rcpch.ac.uk/sites/default/files/2019-09/child_protection_evidence_-_burns.pdf

More details and references at: <http://www.paediatricpearls.co.uk/do-you-know-your-abcde-of-burns-management/>