Paediatric Pearls

by Dr Julia Thomson, Paediatrician

January 2022

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!

FROM THE FRONT LINE: how transient is isolated premature thelarche?

I saw a 6 year old girl in clinic recently with all the signs of precocious puberty. By the time she got to clinic her pubertal changes were sufficiently advanced for me to refer urgently to endocrinology, concerned that menses were just around the corner. Her mother had not sought help earlier because, when her daughter was 16 months old she had been told that her bilateral breast development was normal. I have reassured many parents that isolated premature thelarche is a normal finding but how transient is it really?

Premature Thelarche:

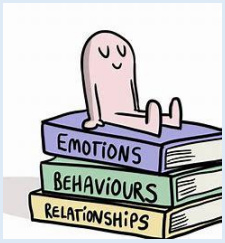
- ► unilateral or bilateral development of the breast tissue in girls aged 12 to 24 months
- ► no other associated pubertal changes such as pubic and axillary hair, acne, adult body odour
- ► bone age, growth velocity, and biochemical testing are normal
- ► it is usually a diagnosis of exclusion; frequent (6 monthly) clinical follow up to monitor growth and pubertal progression is required

Resource: Kota AS. Eiaz S. Precocious Puberty. StatPearls November 2019.

Premature Adrenarche:

- ► early production of adrenal androgens characterizes this benign condition
- ► pubic or axillary hair, body odour, or acne before the age of 8 years
- ► there is no breast development in females and no testicular enlargement in males. Bone age is usually not advanced
- ► rule out exposure to androgen sources such as creams or gels, adrenal tumours, and late-onset congenital adrenal hyperplasia (CAH)

Ahmet Uçar et al, published an article entitled Is Premature Thelarche in the First Two Years of Life Transient? in *J Clin Res Pediatr Endocrinol.* 2012 Sep; 4(3): 140–145, full text available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3459162/. A rather surprising 29.9% of the girls with onset of thelarche under 2 years developed early puberty. Increased growth velocity and/or basal LH level ≥0.3 IU/L were markers of an increased risk of early puberty. The lesson seems to be that young girls with premature thelarche do need follow up.



What is an educational psychologist?

Educational psychologists are trained and registered health professionals who specialise in child development, behaviour and learning. They work with parents, carers, schools, nurseries and children's social care and other services to support children's and young people's learning and social and emotional development.

How do Educational Psychologists support children and young people?

Educational Psychologists support young people and children with their:

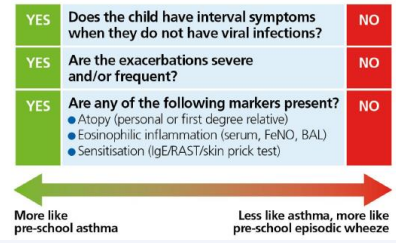
- concentration difficulties
- emotional and behavioural needs
- learning needs
- physical disabilities
- sensory needs such as problems with eyesight or hearing.
- social skills difficulties

They can work with an individual child, a class, group, or with a whole school. A school or nursery can ask for a consultation with an educational psychologist if they are concerned about a child's general learning, behaviour or emotional development. If parents would like to speak to an educational psychologist about their child, they should speak to the Special Educational Needs Coordinator (SENCO) at the child's school or nursery.

Hackney has a free educational psychologist telephone advice line for parents in the borough. https://www.hackneylocaloffer.co.uk/kb5/hackney/localoffer/service.page?id=89xa173qzRE. It is open on Wednesdays between 1 and 3pm during term time.

Find a registered educational psychologist and find out more at https://www.bps.org.uk/member-microsites/division-educational-child-psychology

The "National bundle of care for children and young people with asthma" was launched by NHS England in September 2021, with system - level standards to help improve health outcomes for children and young people with asthma. The standards can be read here: NHS England » National bundle of care for children and young people with asthma. This page also links to the accompanying resource pack.



With thanks to Dr Tammy Rothenberg for highlighting that the ubiquitous "6 puffs of salbutamol every 4 hours reducing regime" - with which children are usually discharged from hospital – is going to go.

You might notice the discharge plans being less prescriptive in the future, with more emphasis on parents and carers checking on breathing effort and how the child looks rather than a rigid "give x puffs of every x hours on day 1".

Asthma specialists are concerned that fixed high use of salbutamol in weaning plans from an asthma attack may mask the signs that asthma is getting worse, the dose is not licensed nor recommended in BNFc, and may encourage excessive salbutamol in a home setting when people should be seeking medical help http://dx.doi.org/10.1136/archdischild-2020-321498. It may feel like it will take longer to show parents what we are looking out for, but in the long run, this should be safer as well as mean that there is more salbutamol in the MDI when needed in the future.

Resource: https://www.england.nhs.uk/publication/national-bundle-of-care-for-children-and-young-people-with-asthma/

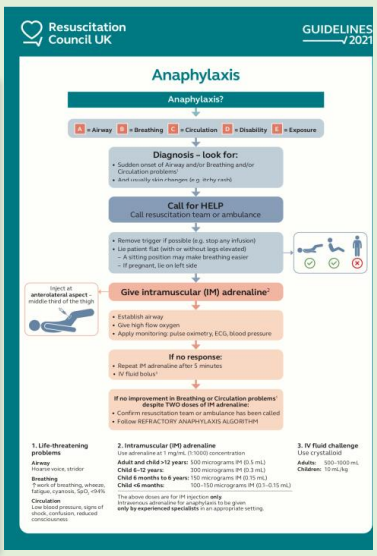
https://www.itchysneezywheezy.co.uk/AsthmaVideos.html has some great videos on how to use inhalers and spacers in children and young people. The same resource has lots of good resources on rhinitis, eczema, allergy and anaphylaxis for both health professionals and patients/parents.

"Did you know?"

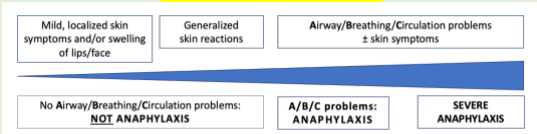
(with thanks to Dr. Dharini Chandrasegaran)

The guideline for the emergency management of anaphylaxis was updated in 2021 based on current evidence.

- ♦ There is now a greater emphasis on administering intramuscular adrenaline with a repeat dose after 5 minutes
- ♦ Administration of chlorphenamine and hydrocortisone are no longer part of the emergency algorithm
- ♦ There is a refractory anaphylaxis algorithm in case of no improvement after 2 doses of adrenaline which consists of repeated IM adrenaline until a peripheral infusion can be set up
- ♦ There is now a specific adrenaline dose for babies <6 months (100-150 micrograms)
- ♦ IV cystalloid fluid boluses should be 10ml/kg (500-1000mls in teenagers and adults)



If there are no A, B and/or C problems, it is *not* anaphylaxis!



Anaphylaxis is a clinical diagnosis; a precise definition is not important for treatment.

Anaphylaxis is characterised by:

- Sudden onset and rapid progression of symptoms.
- **A**irway and/or **B**reathing and/or **C**irculation problems.
- Usually, skin and/or mucosal changes (flushing, urticaria, angioedema).

The diagnosis is supported if a patient has been exposed to an allergen known to affect them. However, in up to 30% of cases there may be no obvious trigger.

Remember:

- Skin or mucosal changes ***alone*** are not a sign of anaphylaxis.
- **Skin and mucosal changes can be subtle or absent in 10–20% of reactions** (e.g. some patients present initially with only bronchospasm or hypotension).

2021 guideline and links to algorithms at: https://www.resus.org.uk/sites/default/files/2021-05/Emergency%20Treatment%20of%20Anaphylaxis%20May%202021_0.pdf