

Paediatric Pearls

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Emergency Paediatrics guidelines

What does "WETF(L)AG" mean on the whiteboard in resus?

W eight: 0-12 months = $0.5 \times \text{age in months} + 4$
1-5 years = $2 \times \text{age in years} + 8$
6-12 years = $3 \times \text{age in years} + 7$

E nergy = 4J/kg

T racheal tube:

int. diameter (mm) = $(\text{age}/4) + 4$
Length (oral) (cm) = $(\text{age}/2) + 12$
Length (nasal) (cm) = $(\text{age}/2) + 15$

F luid bolus = 20mls/kg (aliquots of 10mls/kg in trauma)
0.9% saline

A drenaline = 0.1ml/kg of 1:10 000

G lucose = 2mls/kg 10% dextrose

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The "L" can either mean Lorazepam (0.1mg/kg iv) or can represent the second letter of "Fluid" for those who take exception to the original acronym....

Drug doses for children are worked out on weight and we do not usually know the weight of a child in extremis hence these equations which provide a guide for the leader of the resuscitation team. 2011 sees a change from our one old weight equation to these 3 options which may take some getting used to.

We have a year to get the 2010 ILCOR guidelines bedded in. Inevitably some of the team leaders will be more comfortable at this end of the year working with the guidelines they are familiar with and indeed the hard copies of version 5.0 of the Advanced Paediatric Life Support (APLS) manual will not be available for another couple of months.

So please follow your leader! 3mls/kg extra of 10% glucose will not affect the outcome for the child; a leader who loses confidence because someone says he or she is using the wrong weight calculation might.

This month's featured NICE guideline: ADHD. Diagnosis and Management of ADHD (Attention Deficit Hyperactivity Disorder) in children, young people and adults. *Publ. Sept 2008*

<http://guidance.nice.org.uk/CG72>



ADHD is a heterogeneous behavioural syndrome characterised by the core symptoms of **inattention, hyperactivity and impulsivity**. Not every person with ADHD has all of these symptoms - some people are predominantly hyperactive and impulsive; others are mainly inattentive. Symptoms of ADHD are distributed throughout the population and vary in severity; only those people with **at least a moderate degree of psychological, social and/or educational or occupational impairment in multiple settings** should be diagnosed with ADHD. Determining the severity of ADHD is a matter for clinical judgement, taking into account severity of impairment, **pervasiveness**, individual factors and familial and social context." <http://www.nice.org.uk/nicemedia/live/12061/42107/42107.pdf>

For the purposes of this guideline, children are aged 3 – 11, young people aged 12 – 18 and adults are >18. The care pathway begins in schools or primary care though **children should not be diagnosed or have treatment started by anyone other than a specialist ADHD team**.

There is a fuller summary of this guideline and links to local resources in the GP version of this month's Paediatric Pearls available at www.paediatricpearls.co.uk.

From the literature: Children who snore

Mouth breathing in a well child is associated with adenotonsillar hypertrophy - the main cause of obstructive sleep apnoea (OSA) among children. Ask about snoring at night, apnoeic episodes when asleep, waking at night and related somnolence/lethargy during the day. OSA can also result in behavioural and learning disorders so the authors advise early referral to ENT services. A retrospective cohort study found from 248 patients, 58% were primary snorers and 42% had OSA. The most prevalent ENT findings were adenotonsillar hypertrophy (61.2%), tonsillar hypertrophy (6.8%), adenoid hypertrophy (14.9%), rhinitis (62.5%) and secretory otitis (14.5%).¹

[Braz J Otorhinolaryngol](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1808-86942010000500003&lng=en&nrm=iso&tlng=en). 2010 Oct;76(5):552-6. (Full article at http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1808-86942010000500003&lng=en&nrm=iso&tlng=en)

Normal paediatric observations (ref: APLS manual version 5.0)

Age (years)	Heart rate	Respiratory rate	Systolic B/P	50 th centile	Systolic B/P	5 th centile
< 1	110 – 160	30 – 40	80 – 90		65 – 75	
1 – 2	100 – 150	25 – 35	85 – 95		70 – 75	
2 – 5	95 – 140	25 – 30	85 – 100		70 – 80	
5 – 12	80 – 120	20 – 25	90 – 110		80 – 90	
> 12	60 – 100	15 – 20	100 – 120		90 – 105	

Please also use the PEWS charts as a reference. The default place for children falling into the "RED" zone of PEWS is **resus**.