

Paediatric Pearls

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

I have just uploaded [West Suffolk's 1 page guideline](#) on the management of anaphylaxis to the Primary Care Guidelines section of www.paediatricpearls.co.uk. There are lots more useful guidelines and patient information sheets from around the country (or world, in some cases) on the same page, there for your interest and to help you reduce referrals safely.

Do not do recommendations from NICE (see [August 2014](#) for explanation)

Bacterial meningitis and meningococcal septicaemia (CG102) Publ date: June 2010

- * Do not treat people with meningococcal septicaemia with high-dose corticosteroids
- * Do not use cranial computed tomography (CT) to decide whether it is safe to perform a lumbar puncture. CT is unreliable for identifying raised intracranial pressure.
- * Do not use petechial or purpuric lesion aspirates (obtained with a needle and syringe) when investigating for possible meningococcal disease.
- * Do not use throat swabs when investigating for possible meningococcal disease.

Diarrhoea and vomiting in children (CG84) Publ date: April 2009

- * Do not use anti-diarrhoeal medications.
- * Do not routinely give antibiotics to children with gastroenteritis.

Viral exanthems....

I struggled on the ward last month with a not-too-unwell child with a florid rash and a worried Mum who I could have calmed much more successfully if only a suitable latin word had confidently tripped off my tongue in a timely way. The team asked Dr Google Images what the rash was and found the same photos listed under all sorts of different viral, bacterial and medication eruptions. Dr Andrew Lock has put together a handy PDF summary of some of the more common viral ones, available by [clicking here](#). He will do the same for bacterial causes and medication eruptions later in the year. First up –

Roseola Infantum:

- Causative organism: HHV6
- Incubation 7-10 days, saliva or respiratory spread
- Symptoms: High fever for 3-5 days with runny nose, coryzal symptoms and fatigue
- Rash **may** appear as fever subsides (rash not always present)
- small red papules appear, which blanch on pressure
- Rash starts on trunk/face and spreads outwards
- Rash can fade within hours or last 2-3 days
- Child is usually well, but fever can trigger febrile seizures in 10 %
- [PHE recommended period of quarantine](#) from school/nursery: None

Pictures: <http://www.pcds.org.uk/clinical-guidance/viral-exanthems#images> (figures 18-19)

This month Dr Anna Morgan (Barts Health ED consultant) reviews **two podcasts** from <http://www.stemlynspodcast.org/>

The St Emlyn's site covers a wide range of topics relating to emergency medicine. Worth taking a look at.

The ED approach to the kid with shortness of breath: this 20 minute podcast, which is part of the sites 'induction' series for doctors new to the emergency department covers common conditions causing shortness of breath including croup, bronchiolitis and viral induced wheeze. It provides a systematic approach including key clinical features to look for and appropriate initial treatment. Ideal for doctors and nurses new to the paediatric emergency department.

Button Battery ingestion in children: This podcast covers an important condition. It covers the danger of button batteries and what to do if you are presented with a child who has ingested a button battery or put it in their ear or nose. The main message is that this is a surgical emergency and that these batteries need to be removed quickly if they are in the oesophagus nose or ear as they are highly corrosive. There is a danger of patients developing haemorrhage and erosions and children may die from complications of ingestion.

Please feel free to leave your own suggestions on the blog!

Dr Vicky Agunloye is a paediatric registrar and local mum to a one year old boy. In her occasional series she tackles some of the issues new parents often consult us with.

Excessive crying, often described as infantile colic, is the cause of 10% - 20% of all early medical presentations of infants aged 2 weeks-3 months. Although usually benign and self-limiting, excessive crying is associated with parental exhaustion and stress. **An underlying organic cause is found in <5%.** In the majority of cases, treatment consists not of "curing the colic," but in helping to manage the expectations of the parent.

Colic can be defined as episodes of inconsolable crying in an otherwise healthy infant (<3months). The crying can range from once a week to daily, lasting for several weeks. It is normally in the evening and it usually starts at the same time, "the witching hour", lasting for up to 3hrs.

When these parents present it is vital we take them seriously and give them time (they are likely to need several follow up appointments). By doing this we can reduce inappropriate attendance at A&E, maternal depression, NAI, long term behavioural problems and increase the duration of exclusive breastfeeding.

[Click here for Vicky's guide](#) to the health professional's assessment of the crying baby.

Dr Tom Waterfield's from the literature slot: [the Holy Grail of bronchiolitis management?](#) Not yet I fear....

Over the years numerous efforts have been made to standardise bronchiolitis care and a NICE guideline is currently under development. Over the years several drugs and interventions have been investigated including nebulised Adrenaline, Ipratropium Bromide and Hypertonic Saline. Of all of these trialled interventions hypertonic 3% nebulised saline had seemed the most promising and a Cochrane review published last year suggested that hypertonic saline reduces the length of hospital stay¹. There were however, a number of critics of that Cochrane review who pointed out that around half of the children in the review were studied in either primary care or the ED setting with the other half being inpatients. Furthermore the review included a number of smaller studies from the same authors that may have introduced an element of bias. There were also other concerns around the variability in the definition of bronchiolitis between studies and the variability in the control groups. To explore this further the **SABRE study published in December's edition of Thorax** set out to answer the question; **does the use of hypertonic nebulised saline reduce the length of hospital admission?**² The population group were children under 1 year of age with clinically diagnosed bronchiolitis recruited over two years from 10 centres in the UK. Of those children recruited 159 children were randomised to receive standard supportive care and 158 children were randomised to receive standard supportive care plus 6 hourly 3% hypertonic saline nebulisers. **The study showed no benefit of hypertonic saline over standard nursing care**².

So where does this leave us?

Although there have been concerns regarding possible bronchospasm in response to hypertonic saline it would appear that the regular use of hypertonic saline nebulisers is safe but is it effective? Like so many interventions in medicine the role of hypertonic saline remains unclear and it should be considered on a case by case basis dependent on the response to a test dose. There is however, very little evidence to support the widespread routine use of regular nebulised hypertonic saline and **regular hypertonic saline nebulisers should not become a substitute for good quality supportive nursing care.**

References

1. Zhang L, Mendoza-Sassi RA, Wainwright C, *et al*. Nebulised hypertonic saline solution for acute bronchiolitis in infants. Cochrane database Syst Rev 2013;7:CD006458.
2. Everard M, Hind D, Ugonna K, *et al*. SABRE: a multicentre randomised control trial of nebulised hypertonic saline in infants hospitalised with acute bronchiolitis. Thorax 2014;69:1105-1112 doi:10.1136/thoraxjnl-2014-205953