

Paediatric Pearls

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

The BSACI Nurses in Allergy Group are preparing Standard Operating Procedures (SOPs) for use in allergy clinics. Some, including the one for nasal douching in rhinitis featured here, are already available at <http://www.bsaci.org/Guidelines/SOPs>



How to make a nasal douche:

- Take 240 mls previously boiled and cooled water equal parts: 1/4 tsp salt 1/4 tsp bicarbonate of soda
- Mix all together in a cup
- Lean over a sink and sniff solution into each nostril
- Use all of the solution, letting it run out of your nose into the sink between sniffs
- Blow nose afterwards and wait for 10 minutes before using usual steroid intranasal spray.

An isotonic solution ([home- or commercially made](#)) can be safely used by all age groups, adults and children, to support daily nasal hygiene.

Mucus contains inflammatory mediators. When its transportation through the nose becomes slow due to poor ciliary function, inflammation can increase. Nasal douching helps to remove thickened mucus, therefore reducing inflammation and increasing surface area of mucous membranes exposed to steroids afterwards. It is part of the recommended management of rhinitis and rhinosinusitis.

The **CHILDREN'S SAFEGUARDING** feature this month comes from Newham's CDOP newsletter:

All boroughs have a Child Death Overview Panel (CDOP) which discusses all deaths of children with the exception of still births in line with statutory guidelines. At the panel meeting any modifiable factors in the cause of a child's death are identified, recommendations and lessons learnt are made to the relevant service providers and to the Local Safeguarding Children's Board (LSCB). Some boroughs then disseminate the information via a newsletter which is well worth a read.

Public Health England (PHE) has issued an [urgent alert on bath safety](#), and especially the use of bath seats following a series of deaths and near misses reported by London's Child Death Overview Panels (CDOPs). Bath seats have been implicated in each case, and according to reports, one in three deaths from accidental drowning in children aged 0-2 involve bath seats. **They are not safety devices and children must not be left unsupervised in them.**

New guidance from DoH published March 2015 (replaces 2006 version) on what to do if you think a child is being abused:

<https://www.gov.uk/government/publications/what-to-do-if-youre-worried-a-child-is-being-abused--2>

Viral exanthems by Dr Andrew Lock (link to [whole PDF here](#))

1. Roseola infantum (see [January 2015](#) newsletter)
2. Pityriasis rosea (see [February 2015](#) newsletter)
3. Chickenpox (see [March 2015](#) newsletter)
4. **Erythema infectiosum**

- * Parvovirus B19
- * Incubation 7-14 days
- * Commences with hot, red cheeks ("slapped cheeks") which fades over several days
- * Several days later, a lacy red rash appears on the limbs and trunk, which may be itchy. It lasts for 7-10 days but can recur intermittently for 1-2 months
- * Child is well, and complications are rare
- * [PHE recommended period of quarantine](#) from school/nursery: none



- * Most common in children 5-15 years but this rash seen predominantly < 10 years
- * 40-60% of adults have evidence of past parvovirus B19 infection but most can't remember having symptoms
- * More information for parents (and us) at http://kidshealth.org/parent/infections/bacterial_viral/fifth.html

Pictures: <http://dermnetnz.org/viral/fifth-imgs.html>

Dr Tom Waterhouse's *From the Literature* slot:

The use of Tranexamic Acid in Paediatric Trauma

Tranexamic acid is an anti-fibrinolytic drug that prevents the degradation of fibrin by preventing the activation of plasminogen into plasmin. Tranexamic acid is now widely used in the management of adult trauma with the CRASH2 study demonstrating a clear survival benefit¹. In that study adults over the age of 16 with significant trauma and at risk of further bleeding were randomised to either placebo or Tranexamic acid¹. A total of 20211 trauma patients across 40 countries were recruited¹. The administration of Tranexamic acid significantly reduced the risk of death (RR0.91, 0.81-0.97 p0.00035) and the risk of death by bleeding (RR 0.85 0.76-0.96 p0.0077)¹.

Until recently there had not been any data on the use of Tranexamic acid in paediatric trauma. The Ped-Trax study published in December 2014 reported retrospectively on the use of Tranexamic acid in children presenting to a NATO hospital in Camp Bastion, Afghanistan². Over a 4 year period they treated 766 children (under the age of 18, mean age 11 years)². Of those treated approximately 10% were treated with Tranexamic acid². Retrospective analysis with correction for severity of injury found that the use of Tranexamic acid significantly reduced the risk of death (odds ratio, 0.3; p = 0.03) without any increased risk of thromboembolic complications².

It would appear that Tranexamic acid is safe in children and that there is reasonable data to consider the use of Tranexamic acid in children with severe trauma at risk of further haemorrhage. The RCPCH has produced an evidence statement on the use of Tranexamic acid in children. They suggest treatment is started early (with 3 hours) and that a loading dose of 15mg/kg is given (maximum 1g) followed by an infusion of 2mg/kg for a minimum of 8 hours or until the bleeding stops³.

References:

- 1: Shakur H, Roberts I, Bautista R et al. Effects of tranexamic acid on death, vascular occlusive events, and blood transfusion in trauma patients with significant haemorrhage (CRASH-2): a randomised, placebo-controlled trial. *Lancet*. 2010 Jul 3;376(9734):23-32.
- 2: Matthew J. Wertin, T. Tyner S D et al. Tranexamic acid administration to pediatric trauma patients in a combat setting: The pediatric trauma and tranexamic acid study (PED-TRAX). *Journal of Trauma and Acute Care Surgery*: December 2014 - Volume 77 - Issue 6 - p 852-858
- 3: RCPCH - Evidence Statement Major trauma and the use of tranexamic acid in children November 2012. Available at <http://www.rcpch.ac.uk/system/files/protected/page/Major%20Trauma%20and%20the%20Use%20of%20Tranexamic%20Acid%20in%20Children%20-%20Evidence%20Statement%202012-11.pdf>. Last accessed 16/03/2015

"Paediatric pain predominant functional gastrointestinal disorders" is the new term for tummy ache. The Academy for Paediatric Gastroenterology is holding a study day on it on 15th June. More info on this and other useful and well run courses at <http://www.a-p-g.org/courses/upcoming-courses/>.

ENT slot: with thanks to Mr Sunil Sharma

What to tell parents about tonsillectomy (SIGN guidelines)

- ◆ No role for throat swabs in the management of tonsillitis
- ◆ Most common performed operation in ENT surgery
- ◆ Usually daycase procedure, unless significant co-morbidities or severe OSA
- ◆ Children require 2 weeks off school; in the first week the pain will get worse before it gets better (up to day 6)
- ◆ Encourage eating and drinking as soon as possible after surgery, any food is ok
- ◆ It's normal to have white slough in the tonsillar fossae (where tonsils used to be) after surgery (represents healing tissue)
- ◆ Indications:
 - ☑ Chronic tonsillitis (≥7 documented episodes of tonsillitis in the preceding year, or ≥5 documented episodes of tonsillitis in each of the preceding 2 years, or ≥3 documented episodes of tonsillitis in each of the preceding 3 years)
 - ☑ Previous history of ≥2 peritonsillar abscesses/quinsy
 - ☑ History suggestive of obstructive sleep apnoea
 - ☑ Asymmetrical tonsils
- ◆ Risks of infection, bleeding (up to 2 weeks post operation, any bleeding should be assessed in hospital), pain and damage to teeth



SIGN guidelines: <http://www.sign.ac.uk/guidelines/fulltext/117/>

Fairly helpful parent information at: <http://www.nhs.uk/Conditions/Tonsillitis/Pages/Treatment.aspx> but warn them about some of the blog posts below the article - 63 in all. Many are from adults undergoing tonsillectomy and the risk of bleeding is far less than the tone of the posts would suggest. <http://www.kidshealth.org.nz/tonsillectomy-and-adenotonsillectomy> is probably a more suitable information sheet for parents and is easy to print off. New Zealand site but information is relevant to UK.