Paediatric Pearls

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

Headache: I have just been on a very useful course on children's headaches run by the British Paediatric Neurology Association. Further dates and booking forms here. I shall put some nuggets of information from it into the next few Paediatric Pearls newsletters. *Primary* headaches include migraine and tension headaches. On the front line in general practice and in the ED, our job is to pick out which ones are **secondary** headaches. 1% of attendances to the paediatric ED are for headaches. Reassuringly, 60-70% are caused by viral illnesses, minor head trauma or are primary headaches. 10-20% are due to secondary causes and conditions such as blocked shunt, aseptic meningitis, intracranial haemorrhage or idiopathic intracranial hypertension. There were no cases of brain tumours in the studies cited (Burton et al 1997 and Kan L et al 2000). But about 500 children a year are diagnosed with a brain tumour in the UK and we are not as fast at picking them up (50% are diagnosed within 12-13 weeks) as in mainland Europe (50% within 5-6 weeks). 33% of young people with a brain tumour have headache but 80% of tumour-related headaches have other associated features (Wilne et al, Lancet Oncology, 2007).

So make sure you do - and document - a neurological examination when assessing children with headache!

Urticaria in children - Dr Andrew Lock

- * "Hives" appear due to activation of mast cells in the skin
- * Skin lesions (weals) are red, itchy and swollen and generally appear and disappear within several hours (less than 24 hours)

Acute urticaria (lasting < 6 weeks) caused by:

- # Infection: Viral infections e.g. the common cold, are thought to cause >80% of all cases of acute urticaria in children. Skin lesions tend to appear days to a week after the illness begins. The urticaria tends to last another week or 2 then clears
- *** Drugs:** antibiotics, NSAIDS, opiates
- # Insect bites/stings: localised at the site (more widespread in anaphylaxis)
- *** Food allergy:** onset tends to be within 30 mins of eating the food e.g. peanuts
- * Physical contact: e.g. latex

<u>Chronic urticaria:</u> lasting > 6 weeks (sometimes for months – years)

- * rarely caused by allergies
- * may be a sign of other medical conditions e.g. thyroid disease
- * usually idiopathic and resolves within one year (in around half).

<u>Investigation:</u> (rarely required)

- * history and examination may reveal an infectious cause e.g. symptoms of viral infection preceding rash
- * investigate for infection in unwell children

- * treat any underlying infection and review medications
- * regular non sedating antihistamines (see paediatric BNF)
- * emollients to cool the skin may help with itching

- * British Association of Dermatologists (BAD) guidelines
- d.org.uk/Portals/ Bad/Guidelines/Clinical%20Guidelines/Urticaria%20
- * BAD Patient information leaflet: http://www.bad.org.uk/site/740/default.asp
- * This link contains some good pictures of urticaria: http://www.derm

RIGHT LEFT RIGHT **Bruising** in the shaded anatomical areas is more likely to be due to physical abuse than bruises outwith these regions. Click for full article by Dr Hemali Patel. physical abuse. Archives of Diseases in Child Hea February 2014 A M Kemp, S A Maguire, D Nuttall, et al

Sever's disease (or calcaneal apophysitis – no I can't pronounce that either):

- resents as pain in one or both (in 60%) heels when walking
- as the bones grows faster than the muscles/tendons
- worsened by running and jumping. Swimming may soothe.
- tender over heel, esp. Achilles tendon insertion point, may have swelling, pain on dorsiflexion
- Think RICE acutely (Rest, Ice, Compression, Elevation), stretches later
- Normally self-limiting but may take 2-3 months to get better

Great patient information leaflet from University Hospital Southampton available here. Includes how to do the stretches.

"From the literature" by Dr Tom Waterfield: Rugby injuries

Recently there was a debate on radio 2 regarding the safety and appropriateness of rugby for children. There were several callers who rang in giving horrifying accounts of their child's injury. This prompted me to have a look at the literature and consider how safe is rugby as a sport for children?

One of the best studies I found was a large study looking at catastrophic injuries affecting children playing rugby in South Africa. They looked at 529,483 junior rugby players between 2008 and 2011. Of these 0.24 per 100 000 players (95% CI 0 to 0.65) suffered a catastrophic event (defined as cardiac events, traumatic brain injury, acute spinal cord injuries (ASCI) and fatalities). Interestingly the hooker position was the most dangerous with 46% of all ASCI occurring in players playing hooker (hooker is a position at the centre of the scrum).

UK data is hard to find but a recent study from Bath University (published in February 2014) looked at injury rates and again found that the scrum was a source of significant injury as was an illegal tackle known as the "shoulder charge". This illegal tackle resulted in 15 (CI 12.4 to 18.3) injuries/1000 events which was 7 times greater than a legal tackle.

In summary junior level rugby results in around 1 catastrophic injury per 400,000 players. This risk can be reduced by avoiding playing hooker and by rigorously enforcing the rules around tackling.

Roberts SP, Trewartha G, England M, Stokes KA. Collapsed scrums and collision tackles: what is the injury risk? Br J Sports Med. 2014 Feb 10.

Brown JC1, Lambert MI, Verhagen E, Readhead C, van Mechelen W, Viljoen W.The incidence of rugby-related catastrophic injuries (including cardiac events) in South Africa from 2008 to 2011: a cohort study.BMJ Open

New documents uploaded under the primary care guidelines tab on www.paediatricpearls.co.uk this month come courtesy of London's Children and Young People's (CYP) guideline group, headed up by Dr Chloe Macaulay who is also the clinical lead for the trainee GP/paediatrician Learning Together project. Subjects include atopic eczema, constipation, chronic abdominal pain, developmental red flags, food allergy, gastro oesophageal reflux in infants, headache, lymphadenopathy, nocturnal enuresis, UTI and the aim is to get each topic on to one sheet of A4. Please note that these CYP documents have not been through a formal review process and are not necessarily endorsed by Paediatric Pearls. The CYP group want you to adapt them for your own needs and "localise" them if appropriate. Please feedback to chloe.macaulay@ucl.ac.uk.

Please click here for more background to the guidelines project.