Paediatric Pearls

(Emergency Department update)

Date: May 2010

Put together by: Dr Julia Thomson, Consultant Paediatrician, Whipps Cross Hospital, julia.thomson@whippsx.nhs.uk

Clinical question

Last month you featured the NICE eczema guideline. Could you give me some examples of the specific creams to prescribe? I can never remember which topical corticosteroids are mild, moderate or potent.

A full list of steroids listed by potency can be found in Appendix D of the NICE technology appraisal 81 available at www.nice.org.uk/nicemedia/live/11540/32913/32913.pdf
I have adapted NICE's unbiased table below to make it totally partisan by naming some of the more common creams and ointments that we and our dermatology colleagues tend to use most often. This is by way of example; I am not intending to direct what you actually prescribe.

MILD ATOPIC ECZEMA	MODERATE ATOPIC ECZEMA	SEVERE ATOPIC ECZEMA
Emollients	Emollients	Emollients
250-500g per week of Epaderm, Dermol 500, E45, Doublebase, 50:50 white soft paraffin/liquid paraffin, Diprobase, Vaseline, aqueous cream or Cetraben		
Mild potency topical corticosteroids Hydrocortisone 0.5%, hydrocortisone 1%	Moderate potency topical corticosteroids Eumovate 0.05%, Betnovate 0.025%, Synalar 0.00625%	Potent topical corticosteroids Betnovate 0.1%, Elocon 0.1%, Synalar gel 0.025% Very potent: Dermovate 0.05%
1 finger tip unit (FTU) = 0.5g. For how many FTUs to apply see: http://www.bdng.org.uk/news/patients/Patient_Information_Leaflet_Steroids_Final.pdf		

NICE on topical corticosteroids (Page 72 of full guideline www.nice.org.uk/nicemedia/live/11901/38559/38559.pdf):

- use mild potency for the face and neck, except for short-term (3–5 days) use of moderate potency for severe flares
- use moderate or potent preparations for short periods only (7–14 days) for flares in vulnerable sites such as axillae and groin
- do not use very potent preparations in children without specialist dermatological advice
- a short treatment with a potent steroid is as effective as a longer treatment with a milder one
- only apply steroid creams to the affected area except in children with 2-3 flares a month where "weekend therapy" consisting of 2 consecutive days of steroid treatment each week in between flares as a flare preventative strategy may be tried
- consider the possibility of infection in worsening eczema before simply stepping up the steroid treatment

Interpreting Trauma X-rays

After any immediate life-threatening injuries have been identified and treated, the basic trauma screen consists of **lateral cervical spine**, **chest** and **pelvis** x-rays.

ABCD approach to interpreting and presenting x-rays:
Adequacy, **A**lignment and **A**pparatus
Bones
Cartilage and soft tissues
Disc spaces (in the spine), Diaphragm (in the chest)

There is a useful chapter in the Advanced Paediatric Life Support manual on interpreting trauma x-rays and some self-assessment paediatric radiology cases at http://www.hawaii.edu/medicine/pediatrics/pemxray/pemxray.html

FROM THE LITERATURE:

Oral Ondansetron for Gastroenteritis in a Pediatric Emergency Department. 215 children with diarrhoea and vomiting and moderate dehydration were randomised to receive a dose of ondansetron or placebo prior to oral rehydration therapy. The children were aged 6 months to 10 years (mean ages 26 months in ondansetron group and 30 months in placebo group). The ondansetron group were less likely to get i.v. fluids and had a shorter stay in the Emergency Department but hospital admission rates were similar in the two groups and the ondansetron group had significantly more episodes of diarrhoea. Freedman SB et al. *NEJM* 2006;**354**:1698-705

NICE considered this paper when drafting the 2009 Gastroenteritis guidelines and concluded that, because of the worry over increased diarrhoea, more research was needed in secondary care before ondansetron could be recommended routinely for gastroenteritis in primary care.

This month's featured NICE guideline: *Self harm: the short term physical and psychological management and secondary prevention of self-harm in primary and secondary care. (CG16 publ. November 2004)*

This publication covers the **management in the first 48 hours of adults and young people who self harm**. Management in Primary Care, by the Emergency Services, in the Emergency Department (ED) and by medics/surgeons is covered under separate headings with some inevitable overlap. Quick reference guide: www.nice.org.uk/nicemedia/live/10946/29422/29422.pdf

Some guiding principles:
1. *treat people with care and respect*
2. *ensure privacy and quiet for the service user*
3. *take account of the distress likely to be associated with self-harm (even if they do not seem outwardly distressed)*

Primary care
- Establish mental state and physical injuries (do you need to refer to ED?)
- Assess risk of further self-harm (depression, hopelessness, suicidal intent)
- Share information with other relevant staff and organisations (consent?)
- Unless you are sure it is unnecessary, refer self-poisoning to ED
- If not needing ED, do they need urgent referral to secondary mental health services?

Emergency Departments
- Assess all people who have self harmed for risk at triage
- Offer activated charcoal as early as possible if indicated, preferably <1hour
- Use appropriate pain relief for suturing
- Consult TOXBASE in self poisoning or National Poisons Information Service (NPIS) if still in doubt
- Measure paracetamol levels >4 hours and <15 hours post ingestion
- Management of benzodiazepine, salicylate and opioid poisoning are also detailed

Special measures for children
- Triage, assess and treat children who have self-harmed in a paediatric ED area
- Children should normally be admitted to the paediatric ward
- And assessed the following day by Child and Adolescent Mental Health Services

There is a 60 page (!) patient/carer information guide (children's section from P.34) available at www.nice.org.uk/nicemedia/live/10946/29425/29425.pdf