Paediatric Pearls

(Emergency Department update)

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Criteria for admitting to the paediatric observation facility ("POBS") once a child has been seen by an Emergency doctor:

Children who need a longer period of observation eg. for fluid challenge
Those still waiting for specialty review at 2 hours
Those waiting for paediatric middle grade or senior review
Those waiting for blood, urine and x-ray results

We can only have 5 children at any one time in "POBS" but please do use it if your patient fits the criteria. Many of the paediatric breaches would not have happened this last month had the use of POBS been optimised.

FROM THE LITERATURE:

Guidelines for the diagnosis and management of cow's milk protein allergy (CMPA) in infants. This is a very clear, helpful review article. 5-15% of infants react adversely to cow's milk protein though not all have IgE mediated allergy to it. 0.5% of breastfed babies also show symptoms but they are usually mild – moderate. Most children grow out of it. The authors present consensus management algorithms for both breast and bottle fed babies where CMPA is suspected. The paper was funded by SHS/Nutricia but I think we can still take useful information from it. Vandenplas Y et al. *Arch Dis Child* 2007;**92**:902-908. Full text available at http://adc.bmj.com/content/92/10/902.full.pdf

Clinical question

What if the mum suggests stopping cow's milk formula in a young baby with eczema? Are soya milk or goat's milk formulae worth a try?

Information taken from page 16 of:
www.nice.org.uk/nicemedia/live/11901/38597/38597.pdf

- Consider food allergy:
  1. in children with atopic eczema who have reacted previously to a food with *immediate* symptoms
  2. in infants and young children with moderate or severe atopic eczema, not controlled by optimum management, particularly if associated with colic, vomiting, altered bowel habit or failure to thrive

- Offer a 6–8 week trial of an *extensively hydrolysed protein* formula or *amino acid* formula in place of cow's milk formula for bottle-fed infants aged under 6 months with moderate or severe atopic eczema that has not been controlled by optimal treatment with emollients and mild topical corticosteroids.

- Refer children with atopic eczema who follow a cow's milk-free diet > 8 weeks for specialist dietary advice.

- Diets based on unmodified proteins of other species' milk (for example, goat's milk, sheep's milk) or *partially hydrolysed* formulas should not be used in children with atopic eczema for the management of suspected cow's milk allergy. Diets including soya protein can be offered to children aged 6 months or over with specialist dietary advice.

- Inform women who are breastfeeding children with atopic eczema that it is not known whether altering the mother's diet is effective in reducing the severity of the condition. A trial of an allergen-specific exclusion diet should be considered under dietary supervision if food allergy is strongly suspected (see "From the literature" reference above).

Families may find the National Eczema Society's factsheets at www.eczema.org/factsheets.html helpful

Anaphylaxis

(www.resus.org.uk/pages/reaction.pdf)

The new anaphylaxis guidelines came out in January 2008 and the Resus Council are still adding useful information to their questions and answers page available at www.resus.org.uk/pages/FAQana.htm.

☞ Early treatment with *intramuscular* adrenaline *1:1000* is the treatment of choice

child <6 years	150mcg (0.15mls of 1:1000)
6–12 years	300mcg (0.3mls of 1:1000)
>12 years	500mcg (0.5mls of 1:1000)

☞ Adrenaline is followed by a 20ml/kg iv fluid challenge, chlorphenamine and hydrocortisone (doses on P.20 of the linked guideline)

This month's featured NICE guideline: ***Management of atopic eczema in children from birth up to the age of 12 years (CG57 issued December 2007).***

Guidance is provided on:
- *Diagnosis and assessment of the impact of eczema on the child and family*
- *Management during and between "flares"*
- *Information and education for children and their carers about the condition*

Key priorities:

1. ***Holistic assessment*** *ie. quality of life issues for the child and family*
2. ***Identification and management of trigger factors*** *eg. soaps and detergents, contact, food or inhalant allergens. Children with mild eczema do not need allergy tests.*
3. ***Stepped approach to treatment***

EMOLLIENTS*: need to be used always (during and between flares) for moisturising and bathing therefore a child will need 250g-500g weekly*
TOPICAL CORTICOSTEROIDS *are split into mild, moderate and potent and a table in the guideline explains which type to use where and for how long. Use as soon as signs of a flare (increased itching, dryness, redness) appear and continue for 48hrs after symptoms subside. Can be used on broken skin.*
INFECTIONS *(weeping, pustules, crusts, fever, malaise, worsening eczema) need systemic flucloxacillin (erythromycin if penicillin allergic) for 1-2 weeks. Only swab if likely not to be caused by Staphylococcus. Continue topical steroid. Only use topical antibiotics if the infection is very localised. Eczema herpeticum (punched out lesions which may be blistered or ulcerated, lethargy, distress and worsening eczema) due to herpes virus needs immediate referral to secondary services for acyclovir which is usually initially intravenous.*
ANTIHISTAMINES *are not routinely needed but can be prescribed to children >6 months old if flares disturb sleep*
TOPICAL CALCINEURIN INHIBITORS *eg. tacrolimus or pimecrolimus are generally only prescribed by dermatologists*

4. ***Education*** *should consist of written and verbal information and demonstrations covering how much treatment to use, how often and how to apply it (smooth on, don't rub in. It doesn't matter which cream goes on first but leave a few minutes between applying each one), when to step up or down, how to recognise infected atopic eczema (and the need for new supplies of creams after treatment for an infection). The child should have an annual review with reinforcement of the above.*
5. ***Indications for referral:*** *Uncertain diagnosis, inadequate control (eg. 1-2 weeks of flares/month), eczema herpeticum*

A 20 page quick reference guide on assessment and management is available at: www.nice.org.uk/nicemedia/live/11901/38566/38566.pdf