

Paediatric Pearls

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

New feeding series!

One of my ED colleagues requested that we run a series on feeding issues from birth to 16 to fit in with the emergency training curriculum for junior doctors. This is a huge topic requiring a significant amount of liaising with health visitors, breastfeeding advisors, dieticians, speech and language therapists, psychiatrists etc. so we may not be able to get a topic out a month but we will try. Please leave any suggestions for articles [here](#).

We start this month with a superb factsheet entitled "[Common breastfeeding problems](#)" put together by one of our SHOs, Dr Sarah Prentice, and our breastfeeding counsellor, Jo Naylor. Also some information and links on vitamin supplementation.

Breastfeeding advice from [factsheet](#)

Signs of good feeding:

<10% weight loss, birth weight regained by 2 weeks and following centiles thereafter. [Click here](#) for a parent information leaflet on the new growth charts, frequency of weighing etc. produced by RCPCH. Breasts should soften after feed, baby settles post feed, nipples are not sore. 3-4 wet nappies and changing stool by day 3.

How long can expressed breast milk be stored?

Room temperature – 6 hours
Refrigerated – 3-5 days AT THE BACK of the fridge to ensure < 4°C. Never store in the door of the fridge
Ice compartment of a refrigerator – 2 weeks
Freezer – 6 months. Thaw by placing in the fridge. Can be warmed to body temperature in water but never in the microwave.

Clinical question: How do I assess headache? Which children need an MRI?

Up to 50% of 7 year olds and up to 80% of 15 year olds have experienced at least one headache so it is not surprising that we see it rather a lot in clinical practice! A comprehensive (if rather long) clinical guideline on the recognition, investigation and management of childhood headache produced by one of the Great Ormond Street neurologists is available for download [here](#). History is more important than investigations.

Primary headache: migraine, or variant thereof, or tension type headache (TTH)

Secondary headache: consider intracranial haemorrhage, space occupying lesion or benign intracranial hypertension.

International Headache Society criteria for paediatric migraine without aura are ≥ 5 attacks where headache lasted 1 – 72 hours, was associated with nausea/vomiting and/or photophobia/phonophobia and had at least 2 of the following features: bilateral or unilateral frontal/temporal location, pulsating quality, moderate to severe intensity, aggravated by routine physical activity. TTH is less severe and less well defined though the guideline does outline diagnostic criteria. Sudden onset of severe headache, change in nature of headache, pain waking child from sleep or neurological signs make a secondary cause more likely. See also <http://www.paediatricpearls.co.uk/wp-content/uploads/brain-tumour-guideline.pdf>.

Neuroimaging is not indicated in children with recurrent headaches and normal neurology but should be considered in children with seizures and/or abnormal neurology and in those where the history suggests a secondary cause. Dr Prabhakar goes on to say that there is also a place for neuroimaging as therapy ie. parental and professional reassurance.

Patient/parenting information leaflet on migraine type headache (with thanks to Dr Simon Whitmarsh) available [here](#).

NICE has been a bit quiet recently on relevant paediatric topics. So this month I have summarised the [Vitamin D guidance](#) that came out from Barts and the London's Clinical Effectiveness Group in January 2011. It covers both adults and children and is evidence-based as far as is currently possible. Clinical uncertainty in some areas is acknowledged. [Click here for some local views](#) on this guideline and to contribute to the discussion.

Sources of Vitamin D: sunlight and a tiny amount from the diet (oily fish, margarine, some fortified breakfast cereals and infant formulae). Fair skinned people require 3 x 20-30 minute middle-of-the-day exposures to sunlight per week to generate healthy levels of vitamin D during the summer. Darker skinned people need 2-10 times that amount. In the UK there are insufficient UVB rays to generate vitamin D even in the white population between October and March when we all have to rely on our stores. Local prevalence of vitamin D deficiency (<25nmol/l) and insufficiency (26-74nmol/l) among South Asians was found to be >90%.

DoH advises supplementing specific groups:

All pregnant/breastfeeding women	400IU (10µg)/day
Children aged 6/12 to 5 years (unless drinking ≥500mls infant formula)	280IU (7.5µg)/day
Breastfed babies 1/12 to 6/12 if mother is vitamin D deficient	340IU/day
People with low sun exposure eg confined indoors or with covered skin	400IU/day
> 65yr olds	400IU/day

Management of Children with Vitamin D disorders:

- Refer any child you suspect to be hypocalcaemic secondary to Vitamin D deficiency to secondary care urgently
- Reference values are the same as for adults (deficient <25, insufficient 30-80, normal 81-220) (see [discussion on ref.values](#))
- Treatment for rickets (peak incidence 3-18 months) can be started in primary care but children with bone deformities should be referred to a paediatrician
- Treat with oral colecalciferol as per the BNFC for 8-12 weeks and then change to long term maintenance supplements (400IU/day)
- Vitamin D levels, serum calcium and alkaline phosphatase should be rechecked after 3 months. A further 8-12 weeks course may be warranted
- The same treatment is appropriate for children with asymptomatic vitamin D deficiency (<25nmol/l) though hard evidence is lacking (see [discussion](#))
- Children with vitamin D insufficiency (31-80nmol/l) should be advised on sunshine and daily preventative supplements of 400IU/day eg. Abidec, Dalivit, Ketovite, Holland and Barrett colecalciferol, healthy start vits. Their bloods do not need repeating.

In September Dr Amutha Anpananthar, who has helped with Paediatric Pearls for nearly 2 years, leaves Whipps Cross to move on to the next stage of her training. Thank you very much Amutha for all your "from the literature" snippets researched in quiet moments on night shifts and especially for organising the SHOs into producing such a comprehensive 6-8 week check series earlier this year. Good luck in the future!