

Paediatric Pearls

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Analgesia for children

Ametop (Amethocaine referred to as "magic cream") as a local anaesthetic prior to venepuncture or lumbar puncture can be used from 1 month of age. **Oral sucrose** (see "from the literature" section below) works well as a soother in these young babies as does breastfeeding during the procedure (admittedly not very practical for lumbar puncture) so, in practice, we do not tend to use Ametop until they are a bit older. It also takes 40 minutes to work properly and most babies who need intervention need it fairly fast. Ametop can be systemically absorbed so should not be used on broken or inflamed skin. There is also a **fast-acting vapocoolant spray (Cryogesis)** available for numbing older children's skin prior to venepuncture. You need to spray the area until a thin snow film forms and insert the needle straight away. Very young children probably can't tell the difference between severe cold and pain so it's not worth using it in infants. Be guided by the nurses.

Children should not be left in pain while waiting to see someone in the Emergency Department. There is a comprehensive pain guideline on our intranet and we have recently added **intranasal diamorphine for fast relief of pain from fractured long bones, burns and sickle cell crises**. You will find paediatric guidelines under "Women and Children's Services" when you click on the "Departments" tab on the intranet's front page. Do ask if you need advice.

FROM THE LITERATURE.

This is a systematic review of RCTs looking at the **analgesic efficacy of oral sweet solutions** compared to water or no treatment in infants (1-12 months) during immunisation. There is already a large body of evidence that sucrose or glucose reduces the pain of venepuncture in newborns and the authors conclude that it also works in the older infants though the effects are more moderate. They suggest that healthcare professionals should **consider using sucrose or glucose before and during immunisation**.

Harrison D et al. *Arch Dis Child* 2010;95:406-413. doi:10.1136/adc.2009.174227

A and E clinical question

Should I be worried about a child with a febrile convulsion?

'A febrile seizure usually occurs between 3 months and 5 years of age, associated with fever but without evidence of intracranial infection or defined cause for the seizure'. NIH, USA

Most febrile seizures are generalised tonic clonic (GTCS), but fever can provoke other types of fits. Differential diagnoses include rigors and faints. At least 50% are caused by viruses, 1% of patients have meningitis or encephalitis instead.

SIMPLE febrile seizures (70%)	COMPLEX febrile seizures (30%)
GTCS	GTCS or focal
Last < 10minutes, usually < 2 mins	Last > 10 minutes
Do not recur within same illness	Recur within 24hrs
	Need referral to paediatric team

For families:

- ◆ Febrile seizures are common – 3-4% of children by age 7 will have had one
- ◆ Short febrile seizures are not dangerous, those lasting > 30mins can be
- ◆ May have more febrile fits but does not mean that the child has epilepsy

Risk of recurrence is 30-40% overall. Depends on number of risk factors (low temperature, < 18/12 old, family history, short duration of illness) present. No risk factors = 4%, 1 = 23%, 2 = 32%, 3 = 62%, 4 = 72% risk of recurrence.

Risk of developing epilepsy also depends on risk factors (abnormal neurodevelopment, complex febrile seizures, family history of epilepsy). No risk factors = 0.5% (same as background population risk), 1 = 2.5%, 2-3 = 5-10% risk.

Reference: Paediatric Epilepsy Training (PET) Level 1 course guide. See <http://www.bpona.org.uk/pet/which-course-pet123D.php>

This month's featured NICE guideline: Neonatal jaundice (CG98 published May 2010)

This covers the recognition, assessment and treatment of neonatal jaundice from birth to 28 days of age and requires **a significant change of practice** for all of us and community midwives in particular. 60-80% of newborns get visible jaundice and NICE estimates that currently we formally test about 10% of these. The incidence of brain damage due to bilirubin toxicity has increased in northern Europe recently which is the impetus for this guideline.

The 18 page quick reference guide is at: <http://www.nice.org.uk/nicemedia/live/12986/48679/48679.pdf>

The **2 big service provision changes** points of this guideline are:

- 1) all babies who look even the slightest bit yellow **must have their bilirubin level checked**
- 2) referring to the treatment threshold table will guide us as to which babies need a **repeat bilirubin checked 6 to 12 hours later**

Transcutaneous bilirubinometry is endorsed with clear indications of when to do blood tests instead and when to refer in to hospital for treatment.

Babies must be assessed continually for jaundice in the first 72 hours of life by parents and healthcare professionals. Some babies have an increased likelihood of developing significant hyperbilirubinaemia and these must be reassessed by a healthcare professional within 48 hours of life. The risk factors identified are:

- ☑ Gestational age < 38 weeks
- ☑ Previous sibling requiring phototherapy for jaundice
- ☑ Mother's intention to exclusively breastfeed
- ☑ Visible jaundice in the first 24 hours

Parents are told the risk factors, how to check their baby's skin, eyes and gums for jaundice and the nappy for pale stools or dark urine. They are also told the importance of contacting their midwife should they think their baby is yellow.

Babies jaundiced in the first 24 hours of life require a **blood test within 2 hours**. Babies over 24 hours require **transcutaneous testing** (or blood test if no transcutaneous bilirubinometer is available) **within 6 hours** of first noticing the jaundice.

A 12 page Parent information guide for parents of a jaundiced child is available at: <http://www.nice.org.uk/nicemedia/live/12986/48680/48680.pdf>

There are new phototherapy charts based on the new treatment threshold table, general information on jaundice for all parents of a newborn, a slide set for teaching and audit tools available at: www.nice.org.uk/guidance/CG98