

# Paediatric Pearls

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Put together by: Dr Julia Thomson, Consultant Paediatrician, [julia.thomson@bartshealth.nhs.uk](mailto:julia.thomson@bartshealth.nhs.uk)

Previous editions are all available at [www.paediatricpearls.co.uk](http://www.paediatricpearls.co.uk)

**Taking blood from a child** is not the most enjoyable part of any of our jobs. Always ask yourself whether it really needs doing at all. Here are some tips to make the experience better for the child, their parent(s) and you:

**Support the parent** – if he/she is tense the child will be on edge and you will miss. Explain the procedure and that they need to support, comfort and praise their child. “There’ll be no ice cream if you make a fuss” is a threat. “We’ll just get this done then we can go and get an ice cream. What flavour are you going to have?” is encouragement and allows the child some control.

**Be honest with the child** – never say it won’t hurt. Fear is worse than pain. “It will sting a bit but it’ll be over quickly especially if you can sit very still.” Use choices to give the child some perception of control – “are you going to sit on Mum’s lap or Dad’s lap while I do this?” Reward with bravery sticker afterwards.

**Distraction** – bubbles, magic tricks, books, songs, family photos, games or videos on parents’ mobile phones (<http://buzzy4shots.com/high-tech-distraction/> for suggested distraction apps for your own phone). Some kids like to watch; I put younger ones astride their parent, tummy to tummy. The child’s arm goes under parent’s arm and I work behind parent’s back while they sing, chat and point out photos on their phone to their child all the while giving them a big hug.

**Technical tips** – It is 10 times easier if you have a helper. Keep the child and their extremities warm. Apply a local anaesthetic cream 45 minutes before venepuncture (Ametop is licensed from 1 month). Give sucrose to babies or let them breastfeed while you are taking the blood. Cold spray doesn’t work in very young children (the cold makes them cry as much as pain does). Shine a transilluminator (cheap LED torches work well) through the palm of the hand in a darkened room to see the veins on the dorsum if you are struggling. It is often more secure to site a cannula in young children and catch the blood dripping from the hub than wrestle with a butterfly needle if the child is flinching away. Stretch the skin, choose a well tethered vein if possible and puncture the skin 3-5mm distal to it. If you don’t hit the vein the first time, withdraw slightly and re-angle the needle but do not take it completely out. Once in, take biochem first, then FBC sample to eliminate the risk of EDTA contamination (high K<sup>+</sup>, low Ca<sup>2+</sup>). (NB: take EDTA sample first if doing heel prick blood sampling – before the platelets have time to clump). Only have 2 or 3 attempts before asking someone else to take over; everyone has their bad days. Label samples properly; there is nothing worse than having to go through it all again...

“What do you give a sick bird?”  
Tweetment  
(Child appropriate joke on every page)

[Click here](#) for a crash course in Gillick Competence

On-line resource by paediatric EM team. Well worth a visit.

[www.dontforgetthebubbles.com](http://www.dontforgetthebubbles.com)

[Click here](#) to learn how to make a neonate wee

## Dr Andrew Lock's dermatology series:

**Molluscum contagiosum** is a harmless viral skin condition affecting predominantly infants and young children. Spread is by **direct skin contact**, more likely in wet conditions e.g. sharing a bath or wet towels.

Small white/brown/pink umbilicated papules appear mainly in flexures (warm areas). A white material can often be expressed from the centre of a papule (if there is diagnostic uncertainty). Molluscum may arise in injured areas (Koebner phenomenon). Lesions may persist for months to a couple of years, sometimes leaving small pit-like scars and dermatitis may appear around the lesions or at other sites.

A second peak in young adults is thought to be due to sexual transmission so infection of children though sexual abuse is presumably possible. However, to a greater extent than warts, molluscum is **seen quite commonly on the genital and perineal skin**, and abuse should not be regarded as the likely cause unless there are other suspicious features. Widespread lesions can be found in patients with HIV and other forms of immunosuppression.

**Management:** reassurance, measures to reduce spread. Treatment is not required and they are best left to resolve by themselves. Some patients/parents may want to discuss measures to hasten resolution (although success is limited):

A great article by the Primary Care Dermatology Society (PCDS) available [here](#) with lots of pictures and a **section on treatment**.

**Can my child swim? Can they go to school?** Yes! See this [informative BAD leaflet](#) to give to parents.

Link to the summary of findings of Cochrane review on treatments (2009): <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD004767.pub3/pdf/abstract>

## Depression in children and young people – NICE Quality Standard (QS 48) issued September 2013

**Statement 1.** Children and young people with suspected depression have a diagnosis confirmed and recorded in their medical records.

**Statement 2.** Children and young people with depression are given information appropriate to their age about the diagnosis and their treatment options.

**Statement 3.** Children and young people with suspected severe depression and at high risk of suicide are assessed by CAMHS (Child and Adolescent Mental Health Services) professionals within a maximum of 24 hours of referral.

**Statement 4.** Children and young people with suspected severe depression but not at high risk of suicide are assessed by CAMHS professionals within 2 weeks of referral.

4% of children aged 5-16 have anxiety or depression = 1 or 2 in every class at school. The prevalence is 45% among children in care and 95% in imprisoned young offenders. It is not always easy to spot; look out for:

- Child withdrawing from circle of friends, complaints of boredom or loneliness
- Regression in social development eg. potty training slowing up, and reduced social functioning
- School refusal or truancy
- Continuous low mood, helplessness, tearfulness, irritability, intolerance
- Aches and pains and sleeping difficulties esp. early morning waking
- Fluctuating weight and energy levels / motivation

[www.youngminds.org.uk](http://www.youngminds.org.uk) is a support group for young people and their parents affected by mental health issues. Also runs courses for health professionals.

**Parent Helpline number: 0808 802 5544**

## Dr Tom Waterfield's "From the Literature" slot: Does giving paracetamol for immunisation discomfort increase the risk of vaccine failure?

My wife is a GP and she asked me about the effect of antipyretics – specifically paracetamol - on the efficacy of childhood vaccinations. She had been advising parents to use paracetamol for the treatment of vaccine related fever and irritability when the practice nurse advised her against such practices because of the increased risk of vaccine failure.

Surprisingly there is very little reliable research out there on this topic and the most widely referenced paper was published in the Lancet in 2009<sup>1</sup>. This multicenter, randomised study funded by GSK and conducted in the Czech Republic enrolled 459 infants due to receive Diphtheria, Hepatitis B, Inactivated Polio, Haemophilus B and oral Rota Virus vaccinations. The infants were randomised to either receiving no paracetamol or to receiving regular paracetamol prophylaxis every 6 hours over a 24 hour period for each set of vaccinations including their toddler booster at 12-15 months of age. Paracetamol prophylaxis was effective at reducing fever, pain and irritability but there was also an associated reduction in post vaccination antibody titers with the authors concluding that regular paracetamol prophylaxis reduced the efficacy of childhood vaccinations. Interestingly 64 doses of paracetamol were given within the group randomised not to receive paracetamol with no adverse effects on immunity when used to treat any existing fever.

Unfortunately the study design doesn't reflect clinical practice in that very few of us would recommend that a child has 24 hours of regular Paracetamol with every round of vaccinations. Furthermore it isn't clear how the reduced antibody titer levels will affect infection rates. There is another study from Poland which has just reported (Jan 2014) on the effects of both ibuprofen and paracetamol on the efficacy of childhood vaccinations<sup>2</sup>. It does not support the view that antipyretics dampen the immune response to vaccines.

While paracetamol is probably not indicated routinely for the prevention of vaccination related fever, it is important to reassure parents that the occasional use of paracetamol for an established fever is not associated with reduced vaccine efficacy and is effective at reducing pain and irritability.

Refs:

1. Prof Prymula, R et al. Effect of prophylactic paracetamol administration at time of vaccination on febrile reactions and antibody responses in children: two open-label, randomised controlled trials; Lancet, Volume 374, Issue 9698, Pages 1339 - 1350, 2009.
2. <http://clinicaltrials.gov/ct2/show/NCT01392378?term=13-valent&recr=Open&type=Intr&rank=2>

## 7-item headache attack history (history is of paramount importance)

**Location** frontal including face (sinusitis), migraine is bifrontal in >50% of children. Unilateral, around eye, suggests cluster headache. Tension headaches are bilateral or “all over”.

**Quality** throbbing (migrainous), pressing (tension), sharp (cluster)

**Intensity** mild-moderate = likely tension headache, severe = migraine or secondary headache

**Duration** 1-72 hour attack = likely migraine, minutes - hours (later in day) = likely tension headache

**Frequency** change in frequency may be significant: chronic non-progressive = likely migraine; chronic progressive = possible tumour

**Other** brain tumour headaches associated with neurological findings in 85% of cases within 8 weeks of onset of headache, nearly 100% by 24 weeks. Tilting of head is a red flag. Nausea and photophobia and sometimes auras go with migraines. A watery eye or nose goes with a cluster headache. Some migraines are hemiplegic but differential is arteriovenous malformation.

**Effect** Visual acuity loss is early red flag. Dizziness? – think raised intracranial pressure. Migraine sufferers feel better after a sleep. Headache is mild if still managing at school.