Paediatric Pearls

June 2016

Put together by:

Dr Julia Thomson, Consultant Paediatrician, julia.thomson@bartshealth.nhs.uk

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

JAUNDICE IN NEWBORN BABIES UNDER 28 DAYS

NICE updated its guideline on neonatal jaundice last month. The main change for the paediatricians and midwives among you is that the threshold table has changed and we no longer have to recheck the transcutaneous bilirubin (TcB) or serum bilirubin (SBR) every 6-12 hours once a term baby wavering near the phototherapy line is >24 hours old. Click here for the new chapter on measuring and monitoring bilirubin thresholds before and during phototherapy. Salient points:

In babies who are clinically well, have a gestational age of 38 weeks or more and are more than 24 hours old, and who have a bilirubin level that is below the phototherapy threshold but within 50 micromol/litre of the threshold (see the threshold table and the treatment threshold graphs), repeat bilirubin measurement as follows:

within 18 hours for babies with risk factors for neonatal jaundice (those with a sibling who had neonatal jaundice that needed phototherapy or a mother who intends to exclusively breastfeed)

within 24 hours for babies without risk factors. [new 2016]

In babies who are clinically well, have a gestational age of 38 weeks or more and are more than 24 hours old, and who have a bilirubin level that is below the phototherapy threshold by more than 50 micromol/litre do not routinely repeat bilirubin measurement. [new 2016]

Do not use phototherapy in babies whose bilirubin does not exceed the phototherapy threshold levels [2010]

- repeat serum bilirubin measurement 4–6 hours after initiating phototherapy
- repeat serum bilirubin measurement every 6-12 hours when the serum bilirubin level is stable or falling. [2010]

Stop phototherapy once serum bilirubin has fallen to a level at least 50 micromol/litre below the phototherapy threshold. [2010]

Check for rebound of significant hyperbilirubinaemia with a repeat serum bilirubin measurement 12-18 hours after stopping phototherapy. Babies do not necessarily have to remain in hospital for this to be done. [2010]

The need to actively measure the TcB or SBR in every baby thought to be jaundiced by a healthcare professional or family member remains in the 2016 update. This should be within 2 hours if <24 hours old and within 6 hours if older than that. Reassurance and advice to "put near the window" is not good enough and hasn't been since 2010. The threshold charts have not changed either so everyone using BiliApp to manage these babies' phototherapy requirements need not worry. I have put a new threshold table here. It matches the >38/40 phototherapy graph. Please note that although most babies in the UK do remain in hospital when undergoing phototherapy, there is no clinical reason why those not requiring phototherapy can't have TcBs measured at the stipulated time intervals at home.

The GPs among you are possibly more concerned about babies of 2 or 3 weeks of age with prolonged jaundice. The 2016 update did not touch on these babies but see next month for more information on the management of this cohort.

SAFEGUARDING SLOT: What is sexual bullying?

- ♦ Any bullying behaviour, whether physical or nonphysical, that is based on a person's sexuality or gender. It can be carried out to a person's face, behind their back or by use of technology
- ♦ 71% of all 16-18-year-olds say they hear sexual name-calling with terms such as "slut" or "slag" used towards girls at schools on a daily basis or a few times a week.
- ♦ A recent YouGov poll found that 29% of 16-18-year-old girls say they have been subjected to unwanted sexual touching at school.
- "No one has told me how to respond when someone touches me that I don't want to so I either shout and scream at them which gets me in trouble with the teacher, or I freeze which makes them think I like it.

Quotes and facts from "What is sexual bullying? A guide for parents." (click here for the leaflet) Produced by the Nia Project, London, UK

Periorbital cellulitis with thanks to Dr Kat Smith, KCH



- Children are twice as likely as adults to develop periorbital and orbital cellulitis.
- Often secondary to a superficial cut or infection in adults.
- May be linked to URTI or sinusitis in children.

Periorbital cellulitis can be managed in primary care with 5 - 7 days oral antibiotics eg co-amoxiclav. Parents and GPs need to watch for the red flags of impending orbital cellulitis:

- Eyelid swelling such that the eye is not visible
- Toxic / systemically unwell
- CNS signs or symptoms
- > Severe / persistent headache
- Pain on pressing closed eyelid (suggests septal involvement)
- Pain on eye movement (suggests muscle +/- fat involvement)
- Diplopia; older children should be able to describe "seeing double", younger children may become unsteady when walking or struggle to grab objects
- Reduced visual acuity; the younger child may struggle to play with smaller / more "fiddly" toys
- ▶ Proptosis +/- ophthalmoplegia
- Absent light reflexes
- No improvement / worsening despite 48hrs oral antibiotics
- Neonatal age group (may be congenital dacryocystitis)

Refer orbital cellulitis to paediatrics or ophthalmology. Kat's full article on this topic plus references are <u>available here</u>.

NEW SERIES!!

Paediatric Orthopaedics



CURLY TOES: with thanks to Miss Natasha Picardo-Green, orthopaedic registrar at Barnet Hospital, London, UK

What is it?

- > A common congenital deformity
- > Can affect third, fourth and fifth toes. Often bilateral
- > Flexion and varus deformity of interphalangeal joint
- ➤ Most commonly caused by contracture of flexor digitorum longus (FDL) or FDB (brevis) tendon (click here for a fascinating - for those of us who were asleep during the relevant lecture at medical school interactive diagram of the anatomy of the foot)
- > Asymptomatic in most cases

What do I do about it?

- ➤ No need for investigations
- Treatment is usually conservative there is potential for spontaneous resolution in first 5 years of life
- No benefit to toe strapping
- > Refer to paediatric orthopaedic surgeon if severe toe deformity / nail bed deformity for soft tissue release
- Patient/parent information:

https://www.schn.health.nsw.gov.au/parents-andcarers/fact-sheets/curly-toes

Photo from www.hyperbook.com, educational site for orthopaedic trainees