Paediatric Pearls

March 2015

Put together by: Dr Julia Thomson, Consultant Paediatrician, julia.thomson@bartshealth.nhs.uk

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

Dr Tom Waterfield's "from the literature" slot: **Seizing an opportunity – Deferred consent in paediatric emergency research!**

Status epilepticus is a common problem encountered by paediatricians and ED physicians. The current treatment algorithm recommended by NICE suggests a first line treatment of benzodiazepines followed by phenytoin for established status epileptics and general anaesthesia for refractory status epilepticus[1]. This algorithm is widely accepted and used in UK emergency departments. There is however, very little evidence to support this approach. A Cochrane review published by the Cochrane Epilepsy Group in August 2014 included 18 studies with a total of only 2755 paediatric patients treated for status epilepticus [2]. The most striking findings from this study are the lack of data available for comparisons between different approaches. Only three studies investigated the efficacy of Lorazepam compared with Diazepam and one study compared Lorazepam with Phenytoin. There were no studies investigating the effects of Leviteracetam vs Phenytoin [2].

As of March this year the EcLiPSE trial funded by the NIHR will begin the process of recruiting patients presenting with status epilepticus [3]. Children will be randomised to either receiving IV Leviteracetam or IV Phenytoin with consent deferred until after the resuscitation i.e. after the treatment has been given. This landmark study may result in the first real change in the management of status epilepticus for over a decade and should pave the way for more deferred consent emergency department research. The concept of deferred consent throws up a number of interesting ethical considerations that can polarise healthcare professionals. These issues are not within the scope of PP but I would urge everyone to have an open mind and for those keen to learn more about deferred consent in paediatric emergency research to read the paper by Woolfall et al published in 2013 [4].

References

1) NICE Guidance CG137: The epilepsies: the diagnosis and management of the epilepsies in adults and children in primary and secondary care. Available from - http://www.nice.org.uk/guidance/cg137. Accessed 22/02/2015.
2) Prasad M, Pudukode R et al. Anticonvulsant therapy for status epilepticus. Editorial Group: Cochrane Epilepsy Group. Published Online: 10 SEP 2014.
3) HTA - 12/127/134: A pragmatic randomised controlled trial of intravenous levetiracetam versus intravenous phenytoin in terminating acute, prolonged tonic clonic seizures including convulsive status epilepticus in children, the EcLiPSE Study: Emergency treatment with Levetiracetam or Phenytoin in Status Epilepticus. Available from. http://www.nets.nihr.ac.uk/projects/hta/12127134. Last accessed 22/02/2015.
4) Woolfall K1, Frith L et al. How experience makes a difference: practitioners' views on the use of deferred consent in paediatric and neonatal emergency care trials. BMC Med Ethics. 2013 Nov 6;14:45.

Viral exanthems by Dr Andrew Lock (link to whole PDF here)

1. Roseola infantum (see January 2015 newsletter)
2. Pityriasis rosea (see February 2015 newsletter)
3. **Chickenpox**

- Varicella Zoster Virus
- Infectious (airborne spread or contact with open sores) from 2 days prior to rash until all lesions have crusted over
- Most cases in children <10
- Incubation period 10-20 days
- Itchy red papules, which progress to vesicles, first on stomach/back/face then spreads to other areas of the body. Some get vesicles inside the mouth.
- Intermediate lesions described as "dew drop on a rose petal"
- Lesions are pleomorphic (many lesions at different stages)
- **Some** children experience fever, headache and coryzal symptoms
- Lesions may leave scars, especially if scratched
- PHE recommended period of quarantine from school/nursery: until all vesicles have crusted

Pictures: http://www.dermnetnz.org/viral/varicella-imgs.html

WELCOME to the new trainees who have just rotated

www.paediatricpearls.co.uk was set up in 2010 to house the monthly paediatric updates written to help keep all health professionals working with children up to date in all things paediatric. Many experts and trainees have contributed to it over the last 5 years. Please do browse through it or look up individual topics using the search function or tag cloud. It is all freely provided as food for thought with links to national guidelines as appropriate. Comments, questions, suggestions are welcomed on the site and please let me know if you want to contribute!

"I don't know if I want to breastfeed"

Dr Vicky Agunloye answers Mums-to-be queries in a helpful document with lots of useful links for health professionals and parents alike. Click here for information on "why is breast best?", where to find support, blogs on breastfeeding in public, how to go back to work while breastfeeding and "how do you know if baby is getting enough milk?"

Breastfeeding adequately?	Inadequate milk intake?
feeding every 2 – 5 hours for 20 – 40 minutes	infrequent feeds
3-4 wet nappies and changing stool by day 3	continued urates and/or meconium after day 3
pain free breastfeeding	painful feeds, ineffective sucking
weight loss < 10%	weight loss > 10%
baby settled between feeds	fretful, hungry baby

Waltham Forest up to date information on breastfeeding drop in groups here.

New Feature! Paediatric ENT

With thanks to Mr Sunil Sharma, ENT specialty registrar, Barts Health NHS Trust

OTITIS MEDIA WITH EFFUSION

Otitis media with effusion is common in children (by the age of 10 around 80% of children will have had at least one episode). It is generally self-limiting, with resolution of 90% of patients within 1 year, and it is rare beyond the age of 12.

Important questions to ask: concerns regarding hearing or speech at home or school, history of recurrent acute otitis media, nasal obstruction, family history.

Otoscopy usually reveals a dull tympanic membrane, sometimes a fluid level may be visible.

NICE recommendations are to undertake a period of active observation for up to 3 months, during which time auto-inflation devices (e.g. Otovent) can be used. They advise against the use of antibiotics, decongestants and antihistamines during this period as there is insufficient evidence for their efficacy.

After this period, if there is a persisting 25-30dB hearing loss in the better hearing ear, grommets +/- adenoidectomy can be considered.

Patients with Down's syndrome are generally offered hearing aids as opposed to grommets due to their abnormal ear anatomy and persistence of glue ear.

Has anyone ever really had this good a view of a child's TM?

NICE recommendations (2011): http://cks.nice.org.uk/otitis-media-with-effusion#!scenario

Medical Research Council Multicentre Otitis Media Study Group.Surgery for persistent otitis media with effusion: generalizability of results from the UK trial (TARGET).Trial of Alternative Regimens in Glue Ear Treatment *ClinOtolaryngol Allied Sci* 2001 Oct;**26**(5):417-24.

For parents: http://www.patient.co.uk/health/glue-ear-leaflet

In June 2011 the Government reiterated its commitment to the prevention of radicalisation by publishing a revised, more focused, Prevent Strategy. Work to **prevent radicalisation** focuses on three key objectives:
1) challenging ideology that supports terrorism;
2) protecting vulnerable individuals; and
3) supporting sectors and institutions where there is a risk of radicalisation.

National news recently reported that 3 girls from a Tower Hamlets secondary school had gone to Syria. Parents are understandably very worried about this and the TH safeguarding board have put together a leaflet on how to recognise radicalisation in our children and what to do about it. Download it here. Early signs include:

- Showing sympathy for extremist causes
- Glorifying violence
- Evidence of possessing illegal or extremist literature
- Out of character changes in dress, behaviour and peer relationships
- Secretive behaviour