Paediatric Pearls

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

A collection of "From the literature" snippets relevant to the ED that Amutha has gathered together:

There are some very important differences between cardiac diseases in children and adults. Children can present with colic, sweating, hepatomegaly etc. Prompt recognition and treatment of cardiac emergencies can lead to improved outcomes. Frazier et al review the differences between adult and paediatric cardiac emergencies.
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3097588/

Recognising children with septic shock at triage: a study showed that tachycardia and skin colour changes were the most common findings at triage. They emphasised the importance of timely recorded vital signs and early intervention.
http://pediatrics.aappublications.org/content/127/6/e1585.abstract. Pediatrics May 2011

All staff should use the PEWS score and understand the implications of abnormal scores.

Goyal et al's study showed 82% of adolescents seen in the ED had a sexual history documented, of which 76% reported being sexually active. The documentation of a sexual history was associated with increased STI testing (OR: 3.9). All doctors should document sexual history in adolescents presenting with symptoms (including abdominal pain, genital discharge, dysuria) because it may increase detection and treatment of STIs.
http://www.ncbi.nlm.nih.gov/pubmed/21646260 Paediatrics June 2011

Intraosseous use has low failure and complication rates but cases of children having leg amputation following IO access have been reported. This has been due to compartment syndrome and limb ischaemia. This emphasises the need to monitor limbs with IOs following initial resuscitation. http://www.bmj.com/content/342/bmj.d2778.full Taylor C BMJ 2011

Remember *Good Medical Practice* issued by the GMC? They have recently issued a similar (downloadable) 52 page long document called *0-18 years: guidance for all doctors*.

Some highlights from **Making Decisions**:

- You can provide medical treatment to a child or young person with their consent if they are competent to give it, or with the consent of a parent or the court. You can provide emergency treatment without consent to save the life of, or prevent serious deterioration in the health of, a child or young person.
- You should involve children and young people as much as possible in decisions about their care, even when they are not able to make decisions on their own.

And on **Parental Responsibility**:

- Mothers and married fathers have parental responsibility. So do unmarried fathers of children registered since 15 April 2002 in Northern Ireland, since 1 December 2003 in England and Wales and since 4 May 2006 in Scotland, as long as the father is named on the child's birth certificate.
- Unmarried fathers whose children's births were registered before these dates, or afterwards if they are not named on the child's birth certificate, do not automatically have parental responsibility.
- Adoptive parents have parental responsibility, as do those appointed as a child's testamentary guardian, special guardian or those given a residence order. Local authorities have parental responsibility while a child is subject to a care order.
- People without parental responsibility, but who have care of a child, may do what is reasonable in all the circumstances of the case to safeguard or promote the child's welfare. This may include step-parents, grandparents and childminders. You can rely on their consent if they are authorised by the parents. But you should make sure that their decisions are in line with those of the parents, particularly in relation to contentious or important decisions.

NICE's 2007 UTI guideline was reviewed in May 2011 and no changes made.

NICE put together "**Do not do recommendations**" for each of their guidelines. The UTI ones include:

C-reactive protein alone should not be used to differentiate acute pyelonephritis/upper urinary tract infection from cystitis/lower urinary tract infection in infants and children

Infants and children who do not undergo imaging investigations should not routinely be followed up.

For infants and children aged 6 months and older with first-time **UTI** that responds to treatment, routine ultrasound is not recommended unless the infant or child has an **atypical UTI** (seriously ill; poor urine flow; abdominal or bladder mass; raised creatinine; septicaemia; fails to respond to treatment with suitable antibiotics within 48 hours; infection with non-E. coli organisms).

So please ensure a urine sample is sent to the lab or you will miss an atypical UTI.

Find out all about a project that aims to enhance awareness of brain tumours in children at http://www.headsmart.org.uk/.

Nearly 10 children/week are diagnosed with a brain tumour but in the UK it can take up to 3 times longer than in the States to get a diagnosis.

Get a detailed history including

- New and persistent headache: wakes a child from sleep, occurs on waking, child under 4years of age, confused or disorientated
- Visual symptoms and signs: must have full visual assessment
- Persistent nausea and vomiting
- Motor symptoms and signs: regression, focal weakness, abnormal gait, dysphagia, Bell's palsy not improving by 4 weeks
- Growth and development
- Lethargy

Predisposing factors include family history of brain tumour, leukaemia, sarcoma or early onset breast cancer, previous CNS irradiation, neurofibromatosis, tuberous sclerosis, other familial genetic syndromes.

Indications for a brain scan are discussed in a new RCPCH endorsed guideline. It is important to reassess all children to check improvement as the above symptoms and signs can mimic common childhood conditions. Symptoms can resolve, fluctuate and recur and do not exclude a brain tumour. Normal neuro examination does not exclude a brain tumour either.