Paediatric Pearls

(GP update)

Date: February/March 2010

Put together by:

Dr Julia Thomson, Consultant Paediatrician, Whipps Cross Hospital, julia.thomson@whippsx.nhs.uk

I ran out of time in February to do Paediatric Pearls, hence combining the 2 months. I have not had much feedback from GPs nor any topic requests. Please do email me any ideas or questions you have. I am also waiting to open discussions on our operating a telephone advice line as a resource for you. Do let me know (e-mail or bleep 880 at Whipps) if you think this would be helpful and what format you would envisage.

Julia Thomson

Normal paediatric observations (ref: APLS manual)

Age (years)	Heart rate	Respiratory rate	Systolic B/P
<1	110 – 160	30 – 40	70 – 90
4.2	400 450	25 25	22 25
1-2	100 – 150	25 – 35	80 – 95
2 – 5	95 – 140	25 – 30	80 – 100
5 – 12	80 - 120	20 – 25	90 – 110
> 12	60 - 100	15 - 20	100 - 120

FROM THE LITERATURE:

51 children with ≤ 2 complete bowel movements per week and either pain or straining for ≥ 3 months were randomised to receive placebo or Movicol. The authors conclude that Movicol is significantly more effective than placebo in children with chronic constipation, many of whom had tried other laxatives previously. It also appears to be safe and well tolerated.

Thomson MA et al. Polyethylene glycol 3350 plus electrolytes for chronic constipation in children: a double blind, placebo controlled, crossover study. Arch Dis Child 2007;92:996-1000

Movicol has also been found to be superior to lactulose in a separate RCT. Some of those intervention children needed a stimulant as well. Vaskuijl W et al. PEG 3350 (Transipeg) versus lactulose in the treatment of childhood functional constipation: a double blind, randomised, controlled, multicentre trial. Gut 2004;53:1590-4

It may interest you to know that the NICE Clinical Guideline on Constination in Children is due to be published in May of this year: it will be recommending Movicol (or an equivalent) as first line treatment for constipation.

GP clinical question

The urine dipstick is positive for leucocytes. Does that mean the patient has a UTI?

Leuc and nitrite +ve	Send urine for culture and start antibiotics for UTI
Leuc –ve, nitrite +ve	Probable UTI. Send urine for culture and start antibiotic treatment
Leuc +ve, nitrite -ve	Result may indicate infection elsewhere. Only start antibiotic treatment for UTI if there is good clinical evidence for UTI
Leuc and nitrite -ve	Explore other causes of illness

This month's featured NICE guideline: Urinary Tract Infection: diagnosis, treatment and long term management of urinary tract infection in children (CG54 issued August 2007)

- ✓ Infants and children presenting with unexplained fever ≥38°C or with symptoms and signs suggestive of a UTI should have urine tested within 24 hours. Refrigerate sample if not going to be cultured within 4 hours of collection.
- Clean catch is the method of choice for urine sampling.
- ☑ Risk factors for UTI +/- underlying pathology: poor stream, previous UTI, antenatally diagnosed renal tract anomalies, family history of renal problems, constipation, poor growth.

< 3/12 old:

- Symptoms may include fever, vomiting, lethargy, poor feeding, jaundice, abdominal pain, irritability.
- Refer to paediatrician

Symptoms of upper UTI/pyelonephritis include fever > 38°C, vomiting, lethargy, abdo or loin pain

- 7 10 days oral cephalosporin or co-amoxiclay
- If orals not possible, should have 2 4 days iv cefotaxime or ceftriaxone followed by oral antibiotics for a total of 10 days
- Refer any child with non-specific symptoms and high risk of serious illness to a paediatrician

Symptoms of cystitis/lower UTI include frequency, dysuria, abdo pain, changes to continence)

3 days oral <u>cephalosporin</u>, reassess if child still unwell at 24-48 hrs

Prophylaxis?

Not for first UTI, can use trimethoprim for prophylaxis of recurrent UTIs but treat breakthrough infections with cephalexin.

Imaaina?

See www.nice.org.uk/nicemedia/pdf/CG54quickrefquide.pdf

Parent information?

See www.nice.org.uk/nicemedia/pdf/CG54publicinfo.pdf