**What is neonatal polycythaemia?**

It is the proportion of blood that is made up of cells, not plasma, and is highly likely that the child has a UTI. But the test’s negative predictive value is not so good (around 70%) i.e. some children still have a UTI even though they have no nitrites in their urine. Why?

- only gram -ive bacteria convert nitrates to nitrites in urine; E coli, Proteus and Klebsiella are gram -ive, Enterococcus is not
- Can take 4 hours for this conversion to take place. Babies don’t hold urine in their bladder for that long.

The current **NICE UTI guideline** recommends microscopy and culture to rule out UTI in children younger than 3 but suggests that dipstick urinalysis is enough in older children. They are currently looking at new evidence to see if the dipstick result (leucocytes and nitrites) can be “trusted” in younger children. Update due to be published this year.

**Resources:**

- http://lifeinthefastlane.com/investigations/urinalysis/
- NICE guideline on UTIs in the under 16s https://www.nice.org.uk/guidance/cg54
- AAP guidelines (2011) for management of UTI (full text)

**FRONT LINE PAEDIATRICS**

*Sharing the Learning*

“Acute leukemia, the most common neoplasm in children under 16, has a peak incidence between the ages of 2 and 5. Musculoskeletal complaints are a presenting feature in 20% of children.” from *Pitfalls in Pediatric Orthopedic Trauma: The Limping Child*. Full article written for primary care physicians by Canadian orthopaedic assistant professor, Dr Benaroch, available here.

There are 6 or 7 new paediatric acute lymphoblastic leukaemia diagnoses at Whips Cross per year and our most recent one presented with a limp. The white cells (WBC) only started to rise a few days later, seen on a blood test done because the limp persisted.

**Lessons learnt:**

1. The purpose of the blood test in a limping child is to rule out septic arthritis and oncology.
2. Leukaemia often presents as a limp but very few limpers have leukaemia. If cell lines on the full blood count are affected always request a film even if WBC numbers are normal.
3. Always plan to review a child with a persistent limp. An “irritable hip”, also called transient synovitis, secondary to a viral infection is rare under 3yrs and should resolve by one week in all age groups.

NICE have produced a very helpful clinical knowledge summary on management of a child with acute limp which is available here. **Think about referral to secondary care if:** severe pain; fever; <3 yrs old; associated with fatigue, anorexia, night sweats, weight loss; >9 yrs old with restricted range of movement; safeguarding concerns.

Have a look at http://www.bechildcanceraware.org/campaign/patient-experiences/ where parents have listed the symptoms their child with cancer presented with. Acute lymphoblastic leukaemia is still a devastating diagnosis for families even though the 5-year survival rate has doubled over the past 40 years from 41% to >85% currently. Prognosis depends on a number of factors detailed here.

**Check out the new #Childline app, “For Me”.** Gives young people support whenever they need it. Information from NSPCC about the app at https://t.co/XL6UWv9W

Twitter advert: https://t.co/vaCGNjaQQv

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**Maria Rayner, Safeguarding advisor at Whipps Cross, explains her role:**

*What is a children’s safeguarding advisor?*

One of the key elements of this role is the sharing of information with the community practitioners such as health visitors, school nurses, family nurse partnership, looked after Children’s health team as well as with social care.

*What information do you share?*

It is crucial that information around a child’s attendance to hospital is shared in a timely, factual and safe manner following the confidentiality policy for the organisation and then it is clearly documented in the patients records who the information has been shared with.

*Which children have health visitors and which have school nurses?*

Children who are under 5 all have an allocated health visitor and all children over 5 in full time education have access to a school nurse. Both community practitioners work closely with other services including GPs, children’s centres, schools, nurseries and social care.

*What does a health visitor (HV) do?*

Health visitors are able to provide support for parents and their children around post-natal depression, mental health issues, domestic abuse, bereavements, a child’s disability or health need as well as concerns with drug and alcohol dependencies. They can be found in many different places including health centres, children’s centres and GP surgeries. They can be contacted at the local health centre for advice. HVs will often be contacted by the safeguarding team in the hospital to share information about A&E admissions or observations to hospital. This is often just for information sharing but can also be around ensuring the safety of children, accident prevention and education for parents.

*What does a school nurse do and where do I find one?*

School Nurses can also be contacted at the local health centre. Many people think that School Nurses are based in schools and they are, although some will spend a great deal of time on school sites they are contactable at the local health centre. School Nurses can provide children, young people, school staff and parents with support around health issues, health promotion, sexual health & substance misuse. They can offer drop-ins to their schools where parents of primary school age children can attend to discuss their worries and to secondary schools they will offer drop-ins for young people in a confidential way to discuss their own health needs or worries. They will also follow up on any A&E attendances that the safeguarding team from the hospital contact them about in a similar way to health visitors. This is all about linking up between the acute care and the community to ensure the safeguarding of children.

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**URINALYSIS**

1. specific gravity (Jan ‘17, 2) pH (Feb ‘17), 3) nitrites

Nitrates on a dipstick test has a positive predictive value of 96% ie. it is highly likely that the child has a UTI. But the test’s negative predictive value is not so good (around 70%) i.e. some children still have a UTI even though they have no nitrites in their urine. Why?

- only gram -ive bacteria convert nitrates to nitrites in urine; E coli, Proteus and Klebsiella are gram -ive, Enterococcus is not
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**Paediatric Asthma Study Day** (Flyer and contact details here) 4th May 2017 (08:30-15:30)

Queen Mary Innovation Centre Lecture Theatre, The Royal London Hospital, Whitechapel, London E1 1BB

Cost £50 for nurses, allied health professionals and £75 for medics.