Paediatric Pearls

May 2017

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

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

Tourette syndrome

Reference: Ong MT et al. *Arch Dis Child Educ Pract Ed* 2016;**101**:87-94

Tics are common in children (present in 5% of the population). Most begin between 3 and 8 yrs old, peak at the start of the second decade and resolve by 20yrs. No treatment is required.

Tourette syndrome (TS) is a sub-group of these. Diagnosis:

1. Person must be < 18 yrs old
2. Not on medication with causative side effects
3. No tic free period of > 3 months in a year
4. ≥2 motor tics and ≥1 vocal tic for at least a year

Tourette's is:

- more common in males than females (4.3:1)
- present in 7.7 per 1,000 children
- manifested in 96% of patients by 11 years of age
- associated with ADHD and obsessive-compulsive disorder (OCD) which negatively impacts on psychosocial functioning
- known to intensify in 5-10% of patients but diminish in 85% during or after adolescence
- managed by neurologists +/- CAMHS

UK support group: https://www.tourettes-action.org.uk/ houses a wealth of information for patients, parents, teachers and health professionals.

CHILD SEXUAL EXPLOITATION (CSE):

• can affect any child or young person (male or female) under the age of 18 years, including 16 and 17 year olds who can legally consent to have sex;
• can still be abuse even if the sexual activity appears consensual;
• can include both contact (penetrative and non-penetrative acts) and non-contact sexual activity;
• can take place in person or via technology, or a combination of both;
• can involve force and/or enticement-based methods of compliance and may, or may not, be accompanied by violence or threats of violence;
• may occur without the child or young person's immediate knowledge (through others copying videos or images they have created and posting on social media, for example);
• can be perpetrated by individuals or groups, males or females, and children or adults. The abuse can be a one-off occurrence or a series of incidents over time, and range from opportunistic to complex organised abuse; and
• is typified by some form of power imbalance in favour of those perpetrating the abuse. Whilst age may be the most obvious, this power imbalance can also be due to a range of other factors including gender, sexual identity, cognitive ability, physical strength, status, and access to economic or other resources.

Taken from the recently updated (Feb 2017) national CSE guidance:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/591903/CSE_Guidance_Core_Document_13.02.2017.pdf

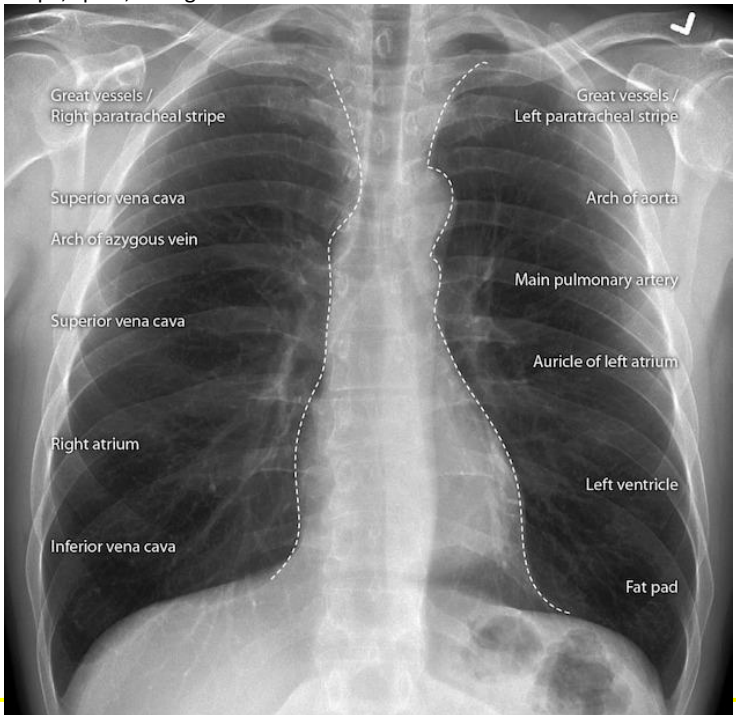
Who should you contact if you have concerns?

Any practitioner working with a child who they think may be at risk of child sexual exploitation should follow the guidance set out in Working Together and share this information with local authority children's social care. You should refer any concerns about a child's welfare to local authority children's social care. If you believe a child is in immediate risk of harm, you should contact the police.

A break from urine and FBC this month to bring you a taster of the forthcoming paediatric radiology series with thanks to 2 of our radiology registrars at Whipps Cross and their supervisor, Dr James Sarkodieh.

Understanding the chest x-ray from https://radiopaedia.org

When you are happy with the technical aspect, assess it in the following order: pulmonary vasculature, aorta, pulmonary artery, cardiac size and shape, spine, ribcage and sternum.



From the Literature: what signs and symptoms do we use to diagnose serious bacterial infection in febrile children?

This somewhat ambitious article is interesting for its background information as much as for the findings of the study. 15,781 children aged < 5 yrs were studied in Australia from June 2004 to July 2006. The measured outcome was the diagnosis of either UTI, pneumonia or bacteraemia. Physicians in the ED had a high clinical index of suspicion of these diagnoses in >94% of the children affected (assumed from the investigations they ordered (which I think is a dubious assumption)) but only started antibiotics empirically in 70-80% of them. 20% of children without bacterial infections were started on antibiotics. I am not sure this study helps much with the prediction of serious illness in the only-just-ill which is surely the Holy Grail for emergency department staff. Much work has been done on this topic since this study which predates NICE's guidelines on Fever in the under 5s and Sepsis.

Interesting snippets from the article's background section:
◦ 7% of their cohort had a bacterial infection. Other studies have suggested a 5% prevalence which is comparable.
◦ 20-40% of parents seek medical assessment when their child develops a fever. Young children experience 3-6 febrile illnesses per year. That's quite a lot of GP or ED presentations per family per year. I must admit that it had not crossed my mind that some parents will seek medical assessment *every time* each of their children has a fever. Thank you to my GP colleagues for not referring in the vast majority of these children in the UK.

Ref: The accuracy of clinical symptoms and signs for the diagnosis of serious bacterial infection in young febrile children: prospective cohort study of 15 781 febrile illnesses. *BMJ* 2010;**340**:c1594 (full text)

Useful 25 minute podcast on recognition of the sick child in the ED or primary care and why we might miss them: https://www.smacc.net.au/2017/03/spotting-sick-child/ .
10 minute equivalent from the same clinician available at https://www.youtube.com/watch?v=N35J3NLJW_s