I am facilitating the “Stabilisation and Transfer” workshop at an APLS (Advanced Paediatric Life Support, www.alsg.org) course this month so have been revisiting what type of neurosurgical case constitutes a “time critical transfer”, i.e. one where the referring hospital has to transfer the patient instead of waiting for the dedicated retrieval team.

In 2009 the National Specialised Commissioning Group reviewed the safety and sustainability of paediatric neurological services in England. Salient points are:

- The need for immediate, life-saving neurosurgery is rare
- Children are likely to present to hospitals without paediatric neurosurgical services
- A CT scan should be performed within 30 minutes of the request (NICE says 2 hours)
- Children will come to more harm waiting for the PICU retrieval team than from being moved quicker by the local experienced anaesthetic team to a neurological centre
- The local clinicians must liaise with the receiving neurosurgical and PICU teams

I have uploaded my Visual aids for the course here if you need a reminder of the CT appearances of different types of head injury. There is also a very clear description at http://www.cranio.sthm.edu/ctscanchange.htm.

The CATS (North London’s Children’s Acute Transport Service) acute neurosurgical emergency transfer check list and guidance is here and South Thames’ guideline is here.

Introduction (Episode 1) to our Minor Injuries series....

Dr Jessica Spedding is a paediatric emergency medicine registrar who has kindly filled in the gaps in my knowledge and put together an excellent 6 part series on minor injuries.

- These are common and are mostly self limiting soft tissue injuries that heal with time.
- Some injuries are particular to paediatrics (pulled elbow) and others are more common in children than adults (supracondylar fracture).
- Children have growth plates and risk asymmetry if they do not heal in a good position.
- Use a systematic approach to assess for injuries that need specific management.
- Always include consideration of non-accidental injury.

Thinking about the upper limb first, a fall on the outstretched hand (FOOSH) will cause a range of different injuries, each more prevalent in different age groups:

Age 1-3: distal radius fracture (usually greenstick or torus) or middle third clavicle fracture
Age 4-8: supracondylar fracture
Age 9-adolescent: distal radius fracture or scaphoid fracture

Wherever the obvious injury you must examine the whole limb to rule out added injuries. In the upper limb examine fingers to shoulder, clavicle and possibly neck. In the lower limb examine toes to hips, check pelvis and lower spine. Read more...

Is this structural talipes or positional talipes and why does it matter?

With thanks to the paediatric physiotherapists at Whipps Cross Hospital and Dr Mujahid Hasan for this article. Good diagrams, illustrations and explanations of paediatric orthopaedic problems also available at http://www.zadeh.co.uk/paediatricorthopaedics/paediatricorthopaedics.htm

CTEV (Structural)
Congenital talipes equinovarus

“Manufacturing”
Abnormal Anatomy
The foot is in equinus, varus, cavus and adductus
Cannot passively correct
Never resolve spontaneously
Ongoing paediatric orthopaedic follow-up
Requires specialist paed ortho referral
Most require tenotomy, some more surgery

“Packaging”
Normal Anatomy
Involves forefoot varus/adductus or calcaneovalgus
Passive correction to at least neutral
Usually resolve spontaneously
Minimal physiotherapy follow-up
No surgery
No long-term issues

CTEV affects 1-3 in every 1000 live births (UK statistics), 2:1 male to female ratio, bilateral in 55% of cases. Positional deformities are much more common (16-36/1000 live births). The Pirani method (http://globalclubfoot.org/ponseti/pirani-scoring) is used to score both. Urgently refer babies without a full passive range of movement to a paediatric physio or orthopaedic team. Management of positional deformity consists of stretches, massage and reassurance. CTEV requires Ponseti casting to start between days 5 and 14 and follow up is for longer. More on this at www.pediatricpearls.co.uk/2012/11/talipes-equinovarus.