Paediatric Pearls

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

Sleep problems affect the whole family's well being. Dr Sophia Datsopoulos, paediatric registrar at Whipps, has put together a series on sleep disorders for Paediatric Pearls, with help from Dr Paul Gringras, professor of paediatric sleep medicine at King's College Hospital.

Sleep impacts on many areas of life, including:

- Learning and memory
- Growth – growth hormone secretion is enhanced by sleep (highest in slow wave sleep, lowest in REM sleep)
- Immunity – sleep deprivation impairs host defences and interferes with nocturnal secretion of cytokines
- Endocrine/Metabolic – sleep deprivation disrupts early morning peak in cortisol, and midnight TSH peak. May be linked with obesity
- Injuries – increase when sleep deprived

Sleep disorders

- Won't / can't fall asleep
  - Sleep onset insomnia
  - Disorders of initiating & maintaining sleep (DIMS)
  - Bedtime resistance
  - Delayed sleep phase
- Unusual behaviours in sleep
  - Parasomnias
    - Sleep walking / sleep talking
    - Night terrors
    - Sleep paralysis
  - Nocturnal enuresis
- Daytime somnolence
  - Narcolepsy
  - Obstructive sleep apnoea
  - Restless legs with periodic limb movements
  - Mood problems

Series starts in March with **"Delayed Sleep Phase"** – relevant for all those teenagers with unsynchronised internal body clocks....

Diagnosis and management of childhood otitis media in primary care, SIGN 2003 (http://www.sign.ac.uk/pdf/sign66.pdf).

This is not a new guideline but we have a lot of it about at the moment as it is nearly always linked to a viral URTI.
http://www.cks.nhs.uk/otitis_media_acute has a more up to date summary of management in primary care (or the ED) of the initial presentation, recurrent acute otitis media (AOM) and persistent cases.

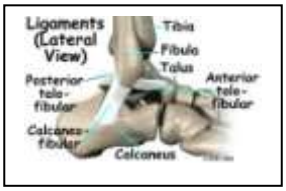
- Definition of AOM: rapid onset inflammation with local (pain or tugging at ear) and/or systemic features (fever, crying, poor sleep). Diagnosed on history and examination of ears. Tympanic membrane bulging red or yellow.
- 1 in 4 children will have an episode of otitis media before the age of 10 and 75% of cases of otitis media are in children under 10, probably to do with the anatomy and angle of the Eustachian tube in children.
- 98% of cases in US and Australia are treated with antibiotics. 31% in Netherlands. SIGN suggests a delayed antibiotic approach – use after 72 hours if child not better. Amoxicillin or erythromycin for 5 days are first line in the UK.
- Decongestants or antihistamines are of no use in otitis media, neither are oils.
- Children with more than 4 episodes in a 6 month period or with a chronic perforation of their tympanic membrane should be referred to ENT
- Children with otitis media with effusion (OME or glue ear) should not be treated with antibiotics, decongestants, steroids or antihistamines.
- If over 3 yrs old with speech or behavioural problems and persistent bilateral OME, refer to ENT and audiology. Younger ones also need to go to audiology if there is a hearing deficit.
- There is an association between OME and parental smoking.
- Grommet insertion is not a contraindication to swimming but putting one's head underwater in a soapy bath is not a good idea.

Sensible parent information leaflet at http://www.patient.co.uk/health/ear-infection-otitis-media

Dr Jess Spedding's Minor Injuries Series
Episode 3: The Paediatric Ankle Injury

These are the most common presenting complaint to Emergency Departments, and their mechanism is usually 'going over' on the ankle, often whilst walking, running, going down stairs or playing sports. In children ligaments are surprisingly strong whilst the bones are less so when compared with adults.

- undress the child to **above the knee** (at least) and compare the 2 sides to allow proper evaluation of size/deformity/swelling
- A significant bony or ligamentous ankle injury is uncommon without swelling. Bruising also points toward bony injury and occurs within a few hours of fractures.
- Follow the orthopaedic mantra of **look, feel, move** taking care not to cause undue distress to a scared child.
- Remember to assess proximally to the knee – proximal fibula fractures are a possibility in inversion injuries so make sure you have palpated well at the knee to know you do not need a tib/fib xray in addition to the ankle xray
- Remember also the foot – an eversion injury tends to cause EITHER a lateral ankle injury OR a base of 5th metatarsal injury (the bony prominence on your lateral foot half way down) so always check the pain is actually originating from the ankle and not this bone – if it is, xray the foot



Remember the Ottawa ankle rules?

Click here for these and more pearls from Jess on assessing the paediatric ankle.

Hypospadias (with thanks to Dr Nikolina Kyprianou and Mr Devesh Misra)

- Should be picked up by the midwife or paediatrician at the new birth check but mild cases may present at 6-8 week check or at circumcision

- Is a congenital defect (0.3-0.7% of male babies) where the urethral opening is displaced ventrally (diagram shows 3 variants)
- Requires a referral to a paediatric urologist
- The child must not be circumcised as the foreskin may be used for reconstructive surgery during the first year of life
- Isolated hypospadias does not need routine renal tract imaging

Full article at http://www.paediatricpearls.co.uk/2013/02/hypospadias/
Click here for parent information leaflet

First afebrile seizure: did you know the child is supposed to have an ECG, full neurological examination and developmental history documented in the ED notes? A recent national audit suggests we don't all know that... Click here for our local guideline on management of the first seizure and let's try and do better next year.