Paediatric Pearls

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

BTS/SIGN 2014: See previous months for resources for parents and schools, recognition of asthma, assessment and categorisation of likelihood of asthma. The stepwise treatment of asthma was outlined in the Feb 2016 newsletter.

Asthma Odds and Ends from 2014 guideline:

☑ Stepping down: regular review of children on preventative treatment is important. Once asthma is under control, reduce inhaled steroid dose if possible by 25-50% every 3 months. Some children can be stepped down during their "good" season.

☑ Doubling the dose of inhaled corticosteroids during asthma exacerbations is of unproven value

☑ There is some limited evidence that a leukotriene inhibitor may be helpful in children at the start of an asthma exacerbation. Continue for 7 days.

☑ Intranasal steroids are effective in the treatment of rhinitis but there is little evidence (unfortunately, as I thought otherwise…) that this necessarily improves asthma control.

In **ACUTE EXACERBATIONS** the following MUST be formally observed (because **):

- Pulse rate (increasing tachycardia generally denotes worsening asthma; a fall in heart rate in life-threatening asthma is a pre-terminal event)
- Respiratory rate and degree of breathlessness (ie too breathless to complete sentences in one breath or to feed)
- Use of accessory muscles of respiration (best noted by palpation of neck muscles)
- Amount of wheezing (which might become biphasic or less apparent with increasing airways obstruction)
- Degree of agitation and conscious level (always give calm reassurance)

Moderate asthma	Able to talk in sentences SpO_2 ≥92% PEF ≥50% best or predicted Heart rate ≤140/min in children aged 2–5 years ≤125/min in children >5 years Respiratory rate ≤40/min in children aged 2–5 years ≤30/min in children >5 years	
Acute severe asthma	Can't complete sentences in one breath or too breathless to talk or feed SpO_2 <92% PEF 33–50% best or predicted Heart rate >140/min in children aged 2–5 years >125/min in children aged >5 years Respiratory rate >40/min in children aged 2–5 years >30/min in children aged aged >5 years	
Life-threatening asthma	Any one of the following in a child with severe asthma:	
	Clinical signs	Measurements
	Silent chest	SpO_2 <92%
	Cyanosis	PEF <33% best or predicted
	Poor respiratory effort	
	Hypotension	
	Exhaustion	
	Confusion	

** Acutely wheezy children do not always appear distressed

Most children referred via the 2 week wait pathway do not turn out to have cancer but we did have one this year – a lump in the nose that turned out to be a rhabdomyosarcoma. Mr Sunil Sharma explains when ENT need to be involved with lumps and bumps in children, concentrating mainly on **neck lumps**:

- Paediatric cervical lymphadenopathy is common, usually only requiring parental reassurance and monitoring
- Ultrasound is the most useful first-line imaging modality for paediatric neck masses not thought to be benign
- Any paediatric cervical lymph nodes that are large (>2cm), persistent, supraclavicular in site, associated with any suspicious features on ultrasound, or any suspicious features on history and examination, should be referred to ENT for consideration of excision biopsy
- Malignancy is very rare in the paediatric population, but can include lymphoma and rhabdomyosarcoma (the most common paediatric soft tissue malignancy)
- Atypical mycobacterial (non-tuberculous mycobacterial) disease can present with slowly enlarging non-tender, indurated neck masses with purplish skin discoloration, not responding to anti-TB meds, and may need surgical treatment
- Midline neck masses include thyroglossal and dermoid cysts.If large or causing recurrent infections, should be excised
- Sinuses around the mandible (1st branchial arch), or at the anterior border of the sternocleidomastoid muscle (2nd branchial arch), or recurrent acute thyroid abscesses (4th branchial arch) should be referred to ENT for consideration of surgical excision of branchial anomalies. May be associated with a genetic anomaly (e.g. Branchio-Oto-Renal syndrome)

Excellent systematic review on management of paed cervical lymphadenopathy: Locke R, Comfort R, Kubba H. When does an enlarged cervical lymph node in a child need excision? A systematic review. *Int J Pediatr Otorhinolaryngol*. 2014 Mar;**78**(3):393-401.

Source: NSPCC (2015) "Always there when I need you": ChildLine review: what's affected children in April 2014 - March 2015.

- During 2014-15, ChildLine counselled 276,956 children and supported a further 9,856 who had serious concerns about another child.
- The ChildLine website received over 3.2 million visits – 5% more than in 2013-14.
- The top 3 concerns counselled were family relationships, low self-esteem/unhappiness and abuse.
- 4 of the top 10 issues related to mental health. These issues were self-harm, suicide, low self-esteem/unhappiness and mental health conditions, Together they accounted for almost one third of total concerns.
- There were 29,126 counselling sessions about abuse in 2014-15

Since 2014:

- The number of counselling sessions about low self-esteem/unhappiness increased by 9%.
- Sexual abuse (including online sexual abuse) increased by 8% from 2013-14.
- Domestic/partner abuse saw an increase of 4% from 2013-14.
- There was a 124% increase in the number of counselling sessions where young people talked about problems accessing services.
- Online counselling continued to grow, rising from 68% in 2013-14, to 71% in 2014-15.

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Public Health England in Surrey and Sussex has sent out a warning about a particularly virulent strain of meningococcus (ST-11 Men W) which is affecting teenagers and young adults in the south east of UK currently. Presentation is atypical – septic arthritis, epiglottitis, GI symptoms. 14-18 year olds are being vaccinated with MenACWY. The Men B vaccine, Bexsero, covers this strain too so babies will not need revaccination. Leaflet aimed at 13-18 year olds available here.