

BEST Session

16/9/2020

Paediatrics

Intro:

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News of developments in BHNFT Children's Services in 2020 / 2021

Pre-Covid

- CAU and children's ward co-located on 8th floor main block
- Planned Nov 2020: children's ward moves to same block as Birthing Centre, new Neonatal Unit and postnatal ward
- Planned Nov 2020: CAU moves to co-locate with paediatric emergency department in a new build at front of ED
- Exciting times; opportunities to improve patient experience, flow and patterns of care
- Expanded consultant workforce – some new names for you soon

News of developments in BHNFT Children's Services in 2020 / 2021

Post-Covid

Currently no separate CAU: 'hot' and 'cold' children's wards
Some previous CAU work (heart murmur review, prolonged jaundice, etc) shifted to OPD

Planned changes still happening! – timescale altered for logistical reasons

Hoping to have combined paediatric ED / CAU new build opening and children's ward move complete by Spring 2021

Aim

- 24 hour CAU with dedicated staff, co-located with paediatric ED
- Single point of referral service; nursing flow coordinators
- New services, eg dedicated jaundice clinic, possibly rapid access clinic
- Expanded and enhanced Community Children's Nursing team with 7 day service
- More care delivered closer to home where feasible

Considerations

- Some aspects subject to business cases / funding / staffing
- Until new CAU / paediatric ED is open, we will still need to ask questions when taking primary care referrals to decide if safer for patient to go to ED before attending the ward
- Comments / suggestions / feedback from primary care colleagues always appreciated

Quiz!

(no technical gimmicks, so think about your answer, and mark yourself)

What's the name of the (relatively)
newly acquired National Trust
property near Barnsley?

- Wentworth Castle Gardens
- Nostell Priory
- Wentworth Woodhouse
- Stainborough Castle

What's the name of the (relatively recent) market eatery development in Barnsley town centre?

- Kitchen Market
- Snap in Tarn
- Market Kitchen
- Sky Lounge

What colour Flag status was Barnsley Town Centre awarded earlier in 2020?

- Yellow
- Red
- Purple
- Green
- Blue

How many decibels can a baby's cry produce?

- 80
- 90
- 100
- 110
- 120

The Unsettled Baby

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Barnsley Hospital NHSFT
BEST meeting, 16/09/2020

My standard disclaimer

- I am a generalist in my area but you are even more specialised in being generalists
- My experience is inevitably with a subgroup of the population
- Lots to learn both ways – not suggesting that management appropriate in secondary care is necessarily ‘extrapolate-able’ to primary care
- This is a genuinely held view, but if you’d like to fill in your evaluation forms now, that would be much appreciated...

‘The Prisoner of Heaven’ by Carlos Ruiz Zafon, p35

- “ It is a scientifically acknowledged fact that any infant a few months old has an unerring instinct for sensing the exact moment in the early hours when his parents have managed to nod off, so he can raise the tone of his cries, thereby ensuring they don’t get more than thirty minutes’ sleep at a time “

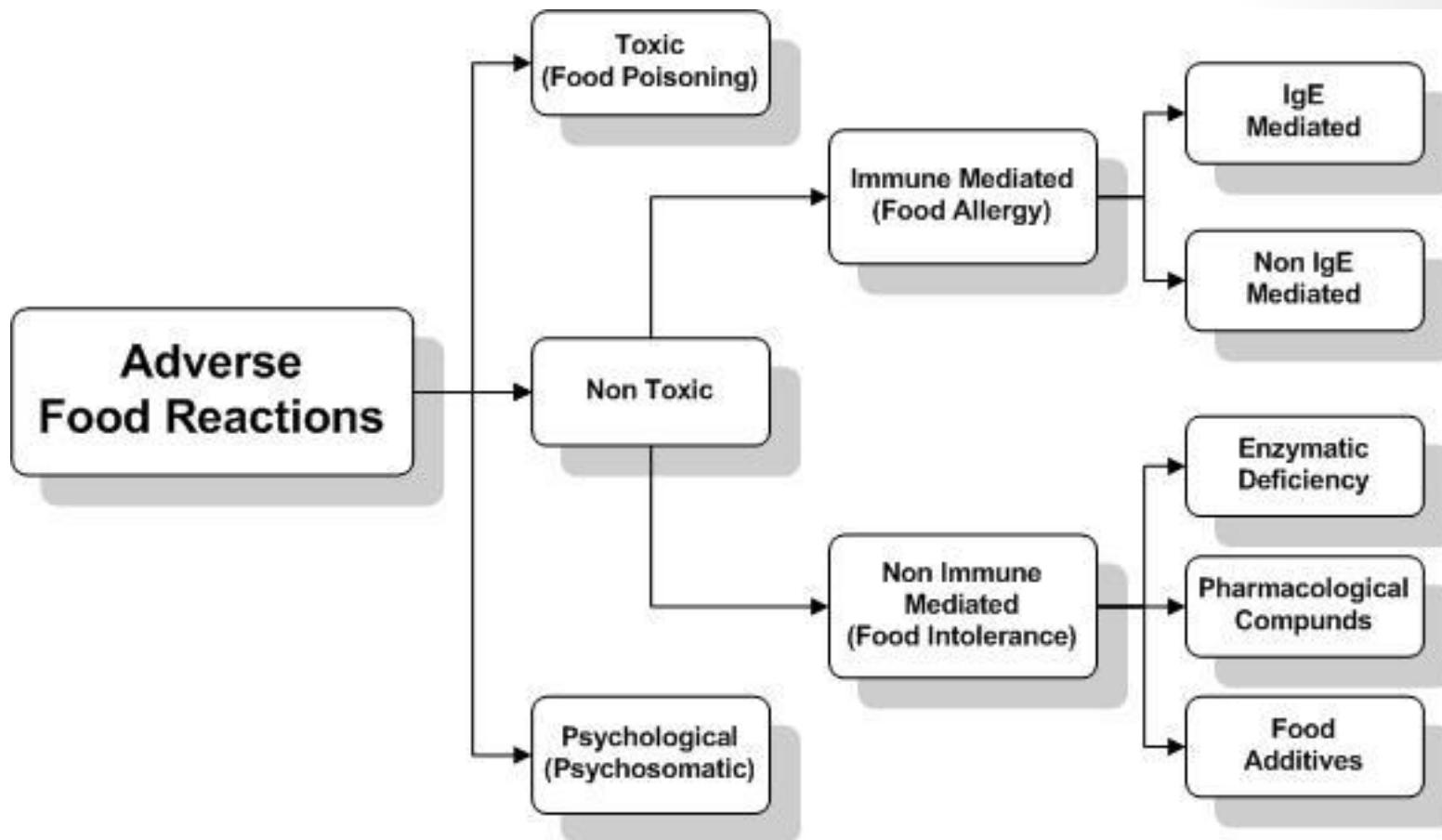
Settled v unsettled

- Vomit
- Fussing
- Self soothing
- Range of normality

- GOR v GORD

Quiz

- CMPA doesn't exist in babies
- CMPA is very rare in babies and should only be diagnosed by investigation in tertiary care
- CMPA exists in babies but is exaggerated by social media, pharma and some medics
- CMPA in babies is common enough in primary care to need awareness and treatment
- CMPA in babies is under-recognised in primary care



Types of Cow's Milk Protein Allergy (CMPA)

- Non IgE
 - Probably more common
 - Delayed (few hours to a day or so)
 - Gut and skin symptoms
 - Diagnosed by trial and error
- IgE
 - Symptoms within a few minutes-an hour
 - Oral, rash, swelling, possibly respiratory
 - Objective testing available

CMPA v Lactose intolerance

- Most of what we see is probably CMPA
 - Try to avoid the term intolerance
- Specific ethnic groups and clinical situations (eg post gastroenteritis) where lactase deficiency may be involved
- LF free milks still contain CMP
- Some EHF's contain lactose

Sensitisation v Clinical Allergy

- Sensitisation: produce IgE antibodies
- Allergy: clinically react
- Tolerance: antibodies present but no clinical reaction
- **The greater the sensitisation (SPT or sp IgE) the more likely clinical allergy present**
- **Level of sensitisation does not relate to severity of reaction**

Locally agreed algorithm for CMPA

- [https://best.barnsleyccg.nhs.uk/clinical-support/medicines/prescribing-guidelines/Infant Formula Prescribing Algorithm.pdf](https://best.barnsleyccg.nhs.uk/clinical-support/medicines/prescribing-guidelines/Infant%20Formula%20Prescribing%20Algorithm.pdf)

Extensively Hydrolysed Formula v Amino Acid Formula

- 90% of CMPA infants will improve with EHF
- 10% will need AAF
- Cost difference (up to 3x)
- Palatability issues (phase in changes)

Breastfeeding in CMPA

- Cow's milk protein from maternal diet can be expressed in breast milk
- This can occasionally cause clinically significant reactions in some babies – both IgE and non IgE
- However, for the great majority of babies it is not clinically relevant
- Asking a lactating mother to exclude dairy from their own diet is not without risks; but occasionally in specific circumstances may be preferable to discontinuing breastfeeding
- Individualised decision with input of dietitian as needed

Other mammalian milks in context of CMPA

- Significant homology between milk from cow, sheep and goat can result in clinical cross-reactivity
- Mare or donkey's milk may be tolerated by some individuals
- Specialised goat's based infant milk formulae are available in the UK market

Various issues

- Degrees of sensitivity / thresholds
- Synonyms (eg casein / whey)
 - Little Miss Moffat
- Spelling of dietitian!

Natural History of CMPA

- Outgrown in approximately 90% (both IgE and non-IgE)
- Usually from age of 12 months upwards but no upper limit
- May be threshold effect
- Milk ladder
- Most children do not have other allergies, but this is possible

Quiz

- GORD doesn't exist in babies
- GORD is very rare in babies and should only be diagnosed by investigation in tertiary care
- GORD exists in babies but is exaggerated by social media, pharma and some medics
- GORD in babies is common enough in primary care to need awareness and treatment
- GORD in babies is under-recognised in primary care

Gastro-oesophageal reflux in young babies: who should be treated?

- Abstract
- Recent guidelines focus on a non-interventionist approach to management of gastro-oesophageal reflux in infancy and emphasise the importance of explanation, reassurance and simple measures such as attention to feeding. Relying on clinical history alone leads to over diagnosis of disease, and widely used medications are often ineffective for symptom relief and carry significant risk of harm. The association between vomiting in infancy and other problems such as crying and poor feeding should not be interpreted as implying causality. When there are strong pointers to underlying gastro-oesophageal reflux disease, invasive investigations are required in order to formulate appropriate intervention.
- <http://dx.doi.org/10.1136/archdischild-2014-306232>

Gastro oesophageal reflux *disease*

- Avoiding confirmation bias
- JP on my shoulder...
- Occam's razor

First measures

- Positioning
- Thickeners
- Carobel
- Gaviscon

H2 antagonist

- Ranitidine - currently unavailable
- Cimetidine - available but ?familiarity

Omeprazole

- MUPS are a pain!
- Suspension – different strengths, issues of ?cost as well as availability and bio-availability
- Dose adjustments – babies grow!

Other

- Prokinetic (this is probably secondary care territory)
 - Domperidone
 - Erythromycin
- Early weaning
- Evidence base!

Quiz:

In babies...

- GORD and CMPA always coexist
- GORD and CMPA never coexist
- GORD and CMPA sometimes coexist
- GORD and CMPA frequently coexist

Quiz

A probiotic is:

- The opposite of an amateur biotic
- Something you give before a post biotic
- A biologically plausible mechanism that has minimal promise for future treatments
- A biologically plausible mechanism that has some promise for future treatments
- A biologically plausible mechanism that has major promise for future treatments
- A load of New Age claptrap

***Lactobacillus reuteri* to Treat Infant Colic: A Meta-analysis**

Valerie Sung, Frank D'Amico, Michael D. Cabana, Kim Chau, Gideon Koren, Francesco Savino, Hania Szajewska, Girish Deshpande, Christophe Dupont, Flavia Indrio, Silja Mentula, Anna Partty and Daniel Tancredi

Pediatrics January 2018, 141 (1) e20171811; DOI:

<https://doi.org/10.1542/peds.2017-1811>

- **OBJECTIVE:** Through an individual participant data meta-analysis, we sought to definitively determine if *L reuteri* DSM17938 effectively reduces crying and/or fussing time in infants with colic and whether effects vary by feeding type.
- **CONCLUSIONS:** *L reuteri* DSM17938 is effective and can be recommended for breastfed infants with colic. Its role in formula-fed infants with colic needs further research.

Key issues

- Plan A
 - Plan B
 - Plan C
 - Continuity
 - Light at the end of the tunnel
-
- ?specialised clinic

Other things to consider in an unsettled baby

- Hernia
- Intussusception
- Constipation / dyschezia
- Inflicted injury / NAI / environmental

Unsettled baby – consider Inflicted Injury

- Bruising in non-mobile babies: local guidance and leaflet
- SCRs – rib fractures
- Links with next sessions

I was going to talk about procrastination but don't seem to have any time left for this...

- Any questions?