Paediatric Pearls

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

My baby has been exposed to chicken pox. Does he need treatment?

Chicken pox , Varicella-Zoster Virus (VZV), is a common infection spread by droplet inhalation of the VZV from contacts with either chicken pox or shingles. Most children have a mild disease course; however those that are immuno-compromised are at a significant risk of severe or fatal disease and need human Varicella Zoster Immunogloblin (VZIG) as soon as possible. Some neonates (<=7 days old) come into this category.

<u>Click here</u> for Dr Vicky Agunloye's concise guide to which babies need VZIg, which do not, and who needs antibodies checking first.

Dr Andrew Lock on <mark>Tinea Capitis</mark> (scalp ringworm):

Tinea capitis is commonest in young children

2 main causative organisms: *Trichophyton tonsurans* and *Microsporum canis*

Fungus can contaminate hairbrushes, clothing and towels

Clinical features can vary:

- dry scaling areas of scalp
- localised alopecia. Broken hairs may be seen
- erythema, pustules or crusting
- lymphadenopathy (more likely with a kerion)

Diagnostic procedures:

- scrapings and hair samples for mycology
- pus for bacterial MC+S

Management:

- oral antifungals are required. First line antifungals are terbinafine and griseofulvin.
- antibiotics if bacterial infection suspected
- unless severe, children should not be kept off school while undergoing treatment

FURTHER READING:

PCDS article with details on treatment: http://www.pcds.org.uk/clinical-guidance/tinea-capitis-scalp Patient information leaflet from British Association of Dermatologists (BAD) here.

Dr Tom Waterfield's "from the literature" slot: Hope for those with peanut allergies?

Updated booklet for parents on **childhood asthma** at http://www.sign.ac.uk/pdf/pat141_CHILDREN.pdf. Helps to explain why we find it hard to get off the fence and diagnose their child as having asthma. 42 colour pages long - probably best to give parents the URL....

Kids won't stay in their own room at night?

New leaflet on www.paediatricpearls.co.uk for parents entitled "How to help your child to get a good night's sleep". Written by Dr Sophie Niall, paediatric registrar, with input from the Redbridge Early Years team.

Part 3 of NICE's "do not do" recommendations (see August 2014 for explanation):

(See August 2014 for explanation)

From Neonatal jaundice (CG98) Published date: May 2010

- * Do not use phototherapy in babies whose bilirubin does not exceed the phototherapy threshold levels. Refer to the threshold table and treatment threshold graphs within the guideline.
- * Do not use sunlight as treatment for hyperbilirubinaemia.

From Headaches (CG150) Published date: September 2012

- * Do not refer people diagnosed with tension-type headache, migraine, cluster headache or medication overuse headache for neuroimaging solely for reassurance
- * Do not offer paracetamol, NSAIDS, opioids, ergots or oral triptans for the acute treatment of cluster headache.

The Haven - The Survivors Network is a specialist charity, based in Waltham Forest, supporting victims and survivors of childhood and current sexual abuse, gang sexual abuse, rape, female genital mutilation and domestic violence. Please print out and display their poster, available here. More info at www.wfhaven.org.uk.

Peanut allergy is the most common cause of fatal anaphylactic reactions to food. The mainstay of treatment is avoidance; which as many parents know is very difficult. A new landmark study (STOPII) from a group based at Cambridge University published in the Lancet earlier this year offers new hope to those who are peanut allergic. Immunotherapy is well-established as a treatment of inhaled allergens such as pollen but it is not currently available to those who are peanut allergic. Previous studies into the effectiveness of immunotherapy for peanut allergic patients were associated with severe adverse reactions. This new study uses oral, rather than subcutaneous, immunotherapy.

Kerion image from http://www.skinsight.com

- usually on the scalp, sometimes face

- boggy pus filled nodule with loose

- usually has associated malaise and

- often misdiagnosed as a bacterial

- simultaneous bacterial infection may

infection leading to inappropriate

A kerion is an abscess caused by a

fungal infection...

lymphadenopathy

surgical management

occur but is uncommon

hairs that easily fall out

99 children aged 7-16 years were recruited from across the UK and randomised to either an immunotherapy or a control group. The control group received no intervention other than peanut avoidance; the immunotherapy group received oral peanut antigen in controlled doses over 26 weeks (typically at home). At the end of this initial phase the children underwent a double blind, placebo controlled food challenge. Following the initial intervention period 62% of the oral immunotherapy group were tolerant to a peanut dose equivalent to 5 peanuts. The children then underwent a second phase of immunotherapy. Following this 91% of children were tolerant to a peanut dose equivalent to 5 peanuts and 54% were tolerant to a dose equivalent to 10 peanuts. The oral immunotherapy was well tolerated with only one patient requiring adrenaline. None of the control group was tolerant to peanut at 6 months.

This study offers hope for thousands of families who suffer with peanut allergy. If most children can develop a tolerance to 5 peanuts then there will be a significant reduction in anaphylactic reactions and reduced anxiety around food packaging and accidental ingestion of small quantities' of peanut. What however, remains unclear is how effective the oral immunotherapy is at inducing a longer term tolerance to peanut after the cessation of therapy.

Reference: Katherine Anagnostou, Sabita Islam, Yvonne King, Loraine Foley PhD etal. Assessing the efficacy of oral immunotherapy for the desensitisation of peanut allergy in children (STOP II): a phase 2 randomised controlled trial. *The Lancet*, Volume **383**, Issue 9925, Pages 1297 - 1304, 12 April 2014.

Dr Lee Noimark's (paediatric allergist) reply: Still early days

Although this study further demonstrates the efficacy of oral desensitisation to peanut what remains as an elusive target is to achieve peanut tolerance in those allergic which is now referred to as sustained unresponsiveness. This means that when no peanut is eaten for several weeks after having undergone desensitisation the patient does not react to the peanut. Although the trials suggest that desensitisation is achievable, tolerance is reached by far fewer. There are also concerns about how many peanuts can be eaten since in similar studies in the US when patients were challenged to far greater than 10 peanuts there were reactions (this as far as I am aware was not trialled in this study). Nevertheless this study shows promise especially in highly motivated families where trace exposure to peanut remains a big concern. It is currently not available outside research studies as a dose regimen has not been agreed, a high level of clinical input is needed and there are still concerns about those who miss a few days of doses because they were unwell as to which dose to go back on to. Newer studies are now underway looking at using boiled peanuts rather than roasted to see if these are safer to use and achieve a better result.