

Defining non-blanching rash

Dear bpac,

I am concerned about the recommendation in Best Practice Journal to refer a child with non-blanching rash immediately to hospital (“Identifying the risk of serious illness in children with fever, BPJ 29, July 2010).

I have seen many children presenting with a “non-blanching rash” and a lot of parental anxiety with it. The rashes I have seen may be due to eczema, skin infections and viral exanthems. Even pressure marks can be described as a non-blanching rash.

This term is too misleading and vague. Let’s use the much more specific term haemorrhagic rash which GPs are quite capable of recognising and referring appropriately.

**Dr Lynley Brown, GP
Gore**

The NICE guideline which was used as the basis for this article is specifically aimed at recognition of serious illness in children with fever. The guidance states that a child with fever, who has a non-blanching rash, is classified as being at high risk of having a serious illness and it is recommended that they are referred to secondary care for further assessment.¹

You are correct in stating that a non-blanching rash in this context is more accurately defined as a haemorrhagic rash. It is expected that clinical judgement would be used in interpreting this guidance and it is not intended that a child with a non-blanching rash and no signs of fever, e.g. as may be seen in eczema, would be referred immediately to secondary care.

Education about the signs of meningitis has increased awareness among parents of the potential importance of a non-blanching rash. Parents are encouraged to have their child assessed by a health professional if they have signs of a non-blanching rash, and in the majority of cases they can be reassured and appropriate advice and education given. GPs are likely to see large numbers of children with non-specific, non-blanching rashes, for every child who presents with symptoms and signs of serious illness.²

The difficulty for parents, and sometimes even for GPs, is in determining which of these children has a serious illness and which do not. A study in the UK reported that 11% of children who presented with a non-blanching rash had meningococcal infection and a further 5% were diagnosed with another serious illness such as Henoch Schonlein purpura, idiopathic thrombocytopenia and acute leukaemia.³

Any non-blanching rash in a child who is feverish and appears unwell is an important marker of serious illness and parents should continue to be encouraged to seek medical attention for their child. It is up to the clinician to interpret the significance of the rash in the context of other symptoms and decide whether further assessment is required

References:

1. National Institute of Clinical Excellence (NICE). Feverish illness in children. NICE Clinical Guideline 47. NICE, London, 2007. Available from: www.nice.org.uk (Accessed Sept, 2010).
2. Hart CA, Thomson AP. Meningococcal disease and its management in children. *BMJ* 2006;333:685-90.
3. Wells LC, Smith JC, Weston VC, et al. The child with a non blanching rash: how likely is meningococcal disease? *Arch Dis Child* 2001;85:218-22.

Lung age for smoking cessation

Dear bpac,

I notice that you make reference to “lung age” in an article in Best Practice Journal (“Telling smokers their lung age increases their chance of quitting”, BPJ 13 May 2008).

The idea is that it reflects damage done to the lung due to the smoking habit, and that confronting smokers with their “lung age” will increase quit rates. Dr. Paul Enright and I have reviewed this issue. First of all, the term “lung age” is a misnomer, as healthy lifelong non-smokers can have ludicrous lung ages. Secondly there is no convincing evidence from the literature that confronting smokers with their “lung age” increases quit rates in smokers. This is relevant information for the general public and the medical profession.

The above is reviewed in: Quanjer P, Enright P. Should we use ‘lung age’? *Prim Care Resp J* 2010;[Epub ahead of print]. Available from: www.thepcrj.org/journ/aop/RHI-032-10.pdf

Prof. Philip H Quanjer
Erasmus University
Rotterdam, Netherlands

The use of lung age as a way of encouraging people to quit smoking is indeed contentious. It is agreed that the supporting evidence is relatively weak, and that there are several factors that may confound the estimation of lung age.

The “snippet” in BPJ 13 was based on the study by Parkes et al¹ in which smokers underwent spirometry. The intervention group were given an estimate of their lung age, and the control group were given a simple spirometry reading. Smoking quit rates were higher in the intervention group compared with the control group. However, in the intervention group, quit rates were similar between those

with “higher lung age” and those with “normal lung age”. This suggests that factors other than telling people their lung age might have also influenced quit rates.

For some individuals, lung age might be a useful motivating strategy, in addition to other smoking cessation methods. However, it does appear that on a population basis, the use of “lung age” may not be helpful.

Reference:

1. Parkes G, Greenhalgh T, Griffin M, Dent R. Effect of smoking quit rate of telling patients their lung age: the Step2quit randomised controlled trial. *BMJ* 2008;336(7644):598-600.

Iodine supplements for goitre?

Dear bpac,

I was interested to read in Best Practice Journal (“Iodine supplements now funded” BPJ 30, Aug, 2010) about the newly funded iodine supplement, NeuroKare, that the Ministry of Health has recommended be used in pregnancy and lactation. What I wish to know is whether I should be considering using these supplements in most of my non-pregnant patients (if we are assuming that our soils are iodine deficient)? Also, should I be using iodine supplements in my patients with mild goitre but normal thyroid function?

GP, South Island

Iodine has been recognised for some time now as being an important trace element. Due to its low content in local soil, it is difficult to achieve adequate levels of iodine in New Zealand. As a public health measure, iodine was added to salt, and more recently iodised salt is now required to be used in most commercially available breads.

Iodine supplements could in theory be taken by non-pregnant patients who may be iodine deficient, but it would

be more appropriate to advise these patients to enhance their dietary iodine intake by the use of iodised salt, bread, seafood, etc, much in the same way as patients are generally advised to achieve their recommended vitamin C intake through diet rather than by supplementation.

Euthyroid goitre (simple, non-toxic goitre) is a non-cancerous hypertrophy of the thyroid without hyperthyroidism, hypothyroidism or inflammation. Except in severe iodine deficiency, the thyroid function is normal and patients are asymptomatic apart from an obviously enlarged, non-tender thyroid.¹ The diagnosis is made clinically along with normal thyroid function.

Euthyroid goitre is most frequently noted at puberty, during pregnancy and at menopause. The cause at these times is usually unclear. Known causes include intrinsic thyroid hormone production defects and, in iodine-deficient countries, ingestion of foods that contain substances that inhibit thyroid hormone synthesis such as raw brassicas e.g. broccoli, cauliflower or cabbage. Other causes include the use of drugs that can decrease the synthesis of thyroid hormone e.g. amiodarone, lithium.

Treatment of euthyroid goitre is directed at the underlying cause, but partial surgical removal may be required for very large goitres. Iodine supplements are not routinely recommended. Advice about adequate iodine intake through dietary measures is appropriate in the majority of cases.

N.B. Measurement of iodine levels to detect deficiency is not recommended.

Reference:

1. Merck Manual. Simple nontoxic goitre (euthyroid goitre). Available from: www.merck.com/mmpe/sec12/ch152/ch152i.html (Accessed Sept, 2010).



**We value your feedback. Write to us at:
Correspondence, PO Box 6032, Dunedin
or email: editor@bpac.org.nz**