Atoms

Howard Bauchner, Editor-in-Chief

Measuring height

Measurement of height, weight, head circumference and blood pressure are commonly done as part of routine paediatric care, whether that care is provided by paediatricians, as in the US and much of Europe, general practitioners as in the UK, or other healthcare providers. Although these "time-honoured" measurements are ingrained in routine care, the evidence-base for some of them is lacking. In this issue, Fayter and colleagues, and Tam Fry in an accompanying perspective, explore the effectiveness, importance and cost of routine height assessment. The data from the 12 original reports reviewed suggest that the diagnostic yield for measuring height for growth hormone deficiency, Turner's syndrome, and other conditions, ranges between 0.22 and 1.84 per 1000 children screened. I suspect it is actually quite higher, because coeliac disease was not considered in most of the studies reviewed and there is growing interest in treating children with familial short stature with growth hormone. A picture is indeed worth a 1000 words - paying attention to the entire growth chart - head circumference, height, weight (BMI later in life) and weight/height, along with knowing parental height and weight, is an important part of paediatric care. See pages 278 and 267

Breastfeeding and HIV disease

The recommendations regarding breast feeding and HIV are controversial, have changed a number of times over the past decade, and continue to be confusing. Optimal feeding recommendations vary depending upon the prevalence of HIV disease in women of child bearing age. In a report form South Africa, Chopra and Rollins describe the knowledge of 334 randomly selected health workers who participate in the prevention of mother to child HIV transmission (PMTCT) programmes as well as the results from observing 640 PMTCT counselling sessions. Unfortunately, they found that most of the workers were unable to correctly estimate the HIV transmission risks of breastfeeding, and that feeding issues were rarely discussed in any depth. No single approach to preventing HIV in infants will be successful. This study suggests that in addition to the various options available, ensuring that PMTCT workers are more knowledgeable about optimal infant feeding practices is critical. See page 288

Evidence-based medicine, quality improvement and guidelines

Evidence-based medicine, improvement and practice guidelines are inextricably linked. This is exemplified in a report from Babl and colleagues from Australia and New Zealand. They reviewed clinical practice guidelines (CPGs) in 11 paediatric emergency departments in Australia and New Zealand. They found good agreement among the CPGs for mild to moderate asthma, but substantially less agreement for moderate to severe and severe to critical asthma. I suspect that these differences reflect the lack of evidence with respect to more severe acute asthma. In addition, it is well known that the "half-life" of CPGs is about 3 years.1 Repeated updating of guidelines is necessary to ensure that they reflect best practice and the most recent evidence. See page 307

Empyema and pneumonia

Empyema rates are rising. In a report from Children's Hospital, Aberdeen, Roxburgh et al, describe the trends in empyema, pneumonia and croup over a 25-year period—1981 through 2005. Beginning in the late 1990s, admission rates per million for empyema rose from about 5 to over 35. Why the increase? Is it diagnostic bias—we simply have more tools to detect disease? Has diagnostic coding changed, so that the "increase" is not real, but simply reflects administrative bias? Have more virulent bacteria led to more complicated pneumonias? Or, perhaps, changes in our antibiotic-prescribing patterns have led to this increase.

As in most of medicine, I suspect that all of these factors contribute to the reported increase in the number of children developing empyema. *See page 316*

Stuart Green

In the February issue of *ADC* we published a case-report that included Stuart Green as an author.² I was recently informed that Dr Green died suddenly last year. We regret that this was not acknowledged at the time of publication. Numerous friends and colleagues have told me that Dr Green was a pioneering neurologist, delightful eccentric and a highly respected and much loved figure in British paediatrics.

This month in *Education & Practice Edition*

- Asthma remains the most common chronic disease of childhood. Many different organisations, including the British Thoracic Society, Scottish Intercollegiate Network and the National Institute for Health produce asthma guidelines—Harry Baumer reviews recent changes. See page ep66
- ▶ In 2006 the National Institute for Health and Clinical Excellence offered guidance around medication options for children and adolescents with attention deficit hyperactivity disorder—Valerie Harpin comments on these recommendations. See page ep58
- ▶ Best practices include articles on neonatal endotracheal intubation and shared care in paediatric heart transplantation. See pages ep44 and ep37

References

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- McFarland R, Hudson G, Taylor R W, et al. Reversible valproate hepatotoxicity due to mutations in mitochondrial DNA polymerase γ (POLG1). Arch Dis Child 2008;93:151–3.