Atoms

Howard Bauchner, *Editor in Chief*

ALL STEROIDS ARE NOT CREATED EQUALLY

Steroids are effective in the management of both moderate and severe croup. Rates of hospitalisation as well as revisits are reduced. The article by Sparrow and Geelhoed from Perth reminds us that not all steroids are of equivalent potency – this may be because of different glucocorticoid or mineralocorticoid effects or biological half life. They conducted a randomised, double-blind trial in which 133 children received either a single dose of 15 mg/kg of dexamethasone or 1 mg/kg of prednisolone. The rate of revisit was substantially lower in the dexamethasone group (7% vs 29%). Since they used an ''equivalent'' dose of prednisolone, they speculate that the half life of drug (dexamethasone (36 to 72 hours) vs prednisolone (12 to 36 hours), likely affected the outcome. This certainly makes biological and clinical sense since croup is often a 2–3 day disease. In checking my handy 2005 BNF for Children (page 407) I found that the oral form of dexamethasone is available in the UK, unfortunately it is unavailable in Australia. The lesson taught by this nicely done study—steroids are not interchangeable.

See page 580

''SPRINKLES'' – A NEW WAY TO PROVIDE MICRONUTRIENTS

Parents struggle to give multivitamins to infants. Very few like giving drops and many complain about the taste of any preparation that contains iron. In resource-poor countries this issue is further complicated by cost and availability. About five years ago Dr Stanley Zlotkin and colleagues in Toronto developed small sachets, similar in size to packets of sugar or artificial sweeteners, which contain various micronutrients (http://www.supplefer.com). We are currently conducting a randomised clinical trial in which infants are assigned to either multivitamins with iron (liquid form) or multivitamins with iron (powder form). The contents of the packets are easily mixed with any foods that are introduced when infants wean. Our primary outcome is adherence with daily use of multivitamins; our secondary outcome is the rate of iron deficiency at nine months of age. In this issue of *ADC*, Sharieff, Bhutta, Schauer, Tomlinson, and Zlotkin report the outcome of a triple blind randomised trial in Pakistan, in which 75 children between 6 and 12 months of age at high risk for diarrhoea received packets containing zinc and micronutrients, zinc, micronutrients, and heat inactivated lactic acid bacteria (LAB), or placebo. The use of LAB, yet another probiotic, has been associated with a reduction in diarrhoea. In this trial, the prevalence of diarrhoea over the two month follow-up period was reduced in the group that received micronutrients and zinc, but not the group that also received LAB. These authors are to be congratulated for their continued work in an important area—the treatment and prevention of diarrhoea in resource-poor countries. Hopefully these packets, which parents find more acceptable that multivitamins with drops will become available around the world.

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MEDICINE IN CHILDREN

Numerous concerns have arisen over the past decade about some practices of the pharmaceutical industry, including direct to consumer advertising and inadequate reporting of clinical outcomes. An additional issue that is gaining notoriety regarding drugs is their off-label use in children. McLay *et al*, from the University of Aberdeen, describe the knowledge of Scottish paediatricians about this issue—over 90% of 151 respondents are aware of off-label medicines and knowingly prescribe them. Professor Imti Choonara, in an accompanying perspective, outlines the progress and politics of improving children's medicines. One area that has received less attention is the impact of an increasingly risk adverse public on the development of drugs and vaccines. It is virtually impossible to develop drugs that have no side effects. This poses enormous problems, and potential liability, for the pharmaceutical industry. Many drug trials involve thousands of patients, but manufacturers are increasingly held liable for serious, but very rare, adverse drug events. I am not certain how to resolve this conflict. Certainly post-marketing surveillance is critical, as is rapid disclosure of potential side effects of drugs.

See pages 550 and 584

THIS MONTH IN FETAL AND NEONATAL EDITION

- Should all newborns have a cardiac echo, or can clinical examination detect critical congenital heart disease? This issue is explored in an article by Drs Patton and Hey and a perspective by Dr Onuzo. The authors and their team are to be congratulated for developing a comprehensive service that has assessed 14 752 infants, and then auditing the programme (**see pages F236 and F263**).
- Length of stay in hospital has not been well described for infants born between 30 and 34 weeks gestational age, even though they are the majority of infants cared for in NICUs. Investigators from the US found that length of stay was longer in the UK and Massachusetts than in a well organised and integrated managed care model in California—Kaiser Permanente Medical Care Program. Although the difference—about 4 shorter days in California—may not mean much on an individual basis, from a healthcare system perspective, this has enormous cost implications (**see page F245**).
- Very low birthweight (VLBW) infants are at high risk for sensory-neural hearing loss. Ari-Even Roth and colleagues from Israel describe a universal neonatal hearing screening programme that employed transient evoked otoacoustic emissions (TEOAE) as a first stage in-hospital screening tool in a cohort of 346 VLBW infants. The ''pass rate'' was high—87.2%, although not surprisingly, it was significantly lower compared with a full-term control group—92.2%. They suggest that TEOAE is effective (**see page F257**).

one's teaching and provides a toolbox of processes.

Part three of this book is concerned with more detailed and theoretical aspects concerning common issues in teaching and learning. Coming on the back of the more practical part of the book, the core educational theories that it presents are made to feel relevant and interesting. It begins with a chapter on curriculum and then moves on to assessment and evaluation.

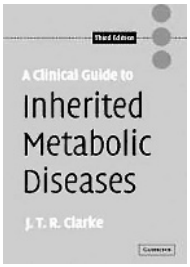
The book is concluded with a useful appendix which gives a glossary of medical education terms and then recommended resources for teaching.

This is a concise book that would be invaluable for anyone wishing to expand their knowledge and practical skills in the field of medical education. Although based on medical student teaching, the information it contains would be useful for any clinical teaching setting. The second part of the book provides a valuable resource that one can dip into when planning teaching sessions. It does just what is says on the tin—a straightforward, practical guide about day-to-day teaching and learning in busy hospitals.

C Turner

A clinical guide to inherited metabolic diseases

Edited by J T R Clarke. Cambridge University Press, 2006, softcover, pp 323, £40 (US$75 (approx.), €60 (approx.)). ISBN 0521614996



''Inherited'' and ''metabolic diseases''—two phrases that send chills down the spine of a junior doctor. These two words represent endless hours one spent learning all about the mutations, the enzymes and co-enzymes, the substrate deficiencies, and all those complex biochemical reactions in medical school, and still failed to grasp the complexity of the problem.

In this book, Dr Clarke has made an effort to provide a clear and concise overview of how to go about diagnosing and treating inherited metabolic diseases.

The book takes off in an easy, smooth fashion, with an introduction to basics of metabolic diseases. It starts with a historic perspective and then goes onto explain the basic principles of deranged metabolism.

The rest of the book is organised into chapters according to the most prominent presenting complaint of patients with metabolic diseases: neuro, hepatic, cardiac, metabolic acidosis, dysmorphism, and acute illness in the newborn. Each chapter provides an in depth analysis of the presenting complaint. Then the chapters go on to outline the diagnosis and management of these conditions. Dr Clarke has managed to achieve a good balance between being simple, yet providing enough detailed information about complex conditions. Unlike other textbooks in the market, which divide their chapters into urea cycle defects, glycogen storage disorders, and so on, this book by Dr Clarke is problem based and moves from presenting complaint to diagnosis and treatment. The book is formatted to appeal to both the novice reader and experienced clinician.

The chapter on screening touches on both ethical and clinical controversies associated with screening for metabolic diseases in the newborn. The chapters on laboratory investigations and recent treatment options offer practical advice to clinicians who see patients with metabolic diseases rarely.

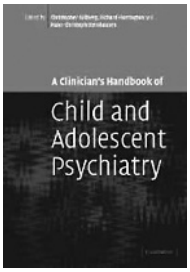
There are, however, some areas where the book disappoints you. The cover page is not very attractive. It does not make you automatically want to reach out for the book on a library shelf. The book does not contain any case reports or anecdotal experiences which would have made interesting reading. It is written in a monologue, failing to capture the imagination of the reader.

On the whole, a very useful book for quick reference to the management of metabolic problems.

M Madhava

A clinician's handbook of child and adolscent psychiatry

Edited by Christopher Gillberg, Richard Harrington, Hans-Christoph Steinhausen. Cambridge University Press, 2006, £65.00 (US$120 (approx.); €95 (approx.)), pp 725, hardback. ISBN 0-521-81936-9



I was very excited when this book arrived; in fact I hadn't heard about this book before, although it is one of few textbooks of child and adolescent psychiatry, and was intrigued to find out how it compared to existing textbooks.

On initial approach the layout looked very user-friendly, with chapters spanning over the whole of child and adolescent psychopathology, but also including sleep disorders, elimination disorders, and gender identity disorders.

I was also positively impressed by the aims of the editors, including wanting to summarise the most relevant scientific knowledge about each disorder in a format useful for clinicians.

Each chapter focuses on a particular disorder or group of disorders. The layout of each chapter is in fact very simple and easy to use, with definition and classification of each disorder at the beginning, a section on epidemiology, the clinical picture, a brief overview of the aetiology, and a larger section on treatment. Each chapter has a very useful appendix, mostly including a list of commonly used rating scales, or the scales themselves, for the relevant disorder. However, some appendixes were better than others. I was not impressed by the appendix to the OCD chapter, while I was by the useful material at the end of the eating disorders chapter. I liked the diagrams and treatment algorithms that are used throughout the book.

There are two very useful chapters on specific developmental disorders of speech and language and ''reading and other learning disorders''. There is also a very useful chapter on brain disorders, tapping into the overlap of child neurology and psychiatry.

I particularly liked the chapters on hyperkinetic disorder, conduct disorder, eating disorders, and the chapter on gender identity disorders, not often included in the taxonomy of child psychiatry.

I was surprised not to find a chapter on deliberate self-harm, given the prevalence of this among adolescents.

This is a very good book; it is well written by experts in the field. It achieves its aims in wanting to be useful and easy-to-read for clinicians. I can see its place in the bookshelves of paediatricians, child and adolescent psychiatrists, as well as other professionals working with children and adolescents. It is a good reference book, given that it is very practical and user-friendly. It is easy to read and the information is well laid out, so that one can pick and read what one is interested in.

N Micali

CORRECTION

H Bauchner. Atoms (*Arch Dis Child* 2006; **91**(7):549). The dosage of dexamethasone should have been stated as 0.15 mg/kg (and not 15 mg/kg as stated in the July Atoms).

Pre-published book reviews

Book reviews that have been accepted for publication but have not yet been published in the print journal can be viewed online at http://adc.bmjjournals.com/misc/bookreviews.shtml