LETTERS TO THE EDITOR

The Nikolsky sign in staphylococcal scalded skin syndrome

EDITOR,—Ladhani and Evans, in their account of staphylococcal scalded skin syndrome (SSSS),[1] accurately describe "large fluid-filled bullae which quickly rupture on slightest pressure" but incorrectly call this the Nikolsky sign. Fragility of blisters merely reflects their superficial position in the epidermis. The Nikolsky sign is dislodgement of intact superficial epidermis by a shearing force, indicating a plane of cleavage in the skin. The defect may be due to staphylococcal toxin as in SSSS, or to epidermal antibodies as in pemphigus. In his thesis on pemphigus in 1895, the Russian dermatologist Pyotr Vasilyevich Nikolsky (1858–1940) described "a weakening relationship and contact among the epidermal layers even in places between lesions on the seemingly unaffected skin". He described three ways of eliciting the sign: (1) the stratum corneum, when pulled, can be stripped off over large areas, and it is possible to displace the stratum corneum of (2) healed skin and (3) healthy uninvolved skin by rubbing. Nikolsky himself gave some credit for determining this sign to his teacher Professor Stoukavenkow at the University of Kiev (1884–1935).[2]

Recently, a 14 month old girl under our care dramatically demonstrated the Nikolsky sign in SSSS. Three days after a minor skin injury on her left thumb which became infected, she developed irritability, coryza, and spreading erythema starting on the face and neck. She presented the next day with exquisitely tender red skin, and within 24 hours large areas of superficial epidermis separated, particularly under the edges of clothing, and in the axillae. Sheets of epidermis peeled back revealing painful raw areas (fig 1). Sparing of the mucosae excluded the alternative diagnoses of toxic epidermal necrolysis and Stevens-Johnson syndrome. She recovered promptly with intravenous flucloxacillin. As would be expected from the superficial level of the epidermal split in SSSS there was no scarring.

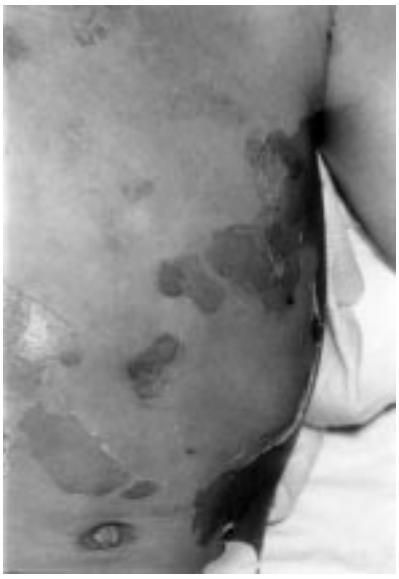

Figure 1 Staphylococcal scalded skin syndrome: superficial epidermal loss in areas subject to friction.

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1 Ladhani S, Evans RW. Staphylococcal scalded skin syndrome. *Arch Dis Child* 1998;**78**:85–8.
2 Polifka M, Krusinski PA. The Nikolsky sign. *Cutis* 1980;**26**:521–4.

Superantigen scalded skin syndromes

EDITOR,—In their recent review article on staphylococcal scalded skin syndrome, Ladhani and Evans provide a detailed and comprehensive review of the physiochemical properties of the staphylococcal exfoliative toxins and discuss their role as proteolytic agents in skin pathogenesis.[1] However, the superantigenic properties of these toxins[2] were not mentioned and the similarities with other desquamating conditions in childhood were overlooked. Superantigens bypass conventional antigen processing and recognition by directly binding to class II major histocompatibility molecules on the surface of antigen presenting cells. They induce massive polyclonal stimulation of T lymphocytes causing proliferation and release of cytokines. Superantigen mediated conditions include scarlet fever and toxic shock syndrome,[3] and may include Kawasaki disease.[4] Desquamation is a recognised feature of these conditions and usually occurs during the later stages of the illness. It seems that the organisms concerned have evolved an ingenious mechanism to induce a state of immune chaos in the host, followed by desquamation and a lowering of the shield of skin defences to their obvious advantage.

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1 Ladhani S, Evans RW. Staphylococcal scalded skin syndrome. *Arch Dis Child* 1998;**78**:85–8.
2 Marrack P, Kappler JW. The staphylococcal enterotoxins and their relatives. *Science* 1990; **248**:705–11.
3 Blackman MA, Woodland DL. In vivo effects of superantigens. *Life Sciences* 1995;**57**:1717–35.
4 Curtis N, Zheng R, Lamb JR, Levin M. Evidence for a superantigen mediated process in Kawasaki disease. *Arch Dis Child* 1995;**72**: 308–11.

Drs Ladhani and Evans comment:

The superantigenic activity of the exfoliative toxins (ETs) of *Staphylococcus aureus* is still controversial—as a consequence, its discussion was not within the scope of our article. ETs have been shown to stimulate both Vβ-bearing murine and human T cells characteristic of superantigens as well as skin associated lymphoid tissue.[1] However, Fleischer's group provide a strong argument against the toxins being superantigens.[2] They observed that most of the studies on the toxins' superantigenic activity used commercial preparations and showed that, although the commercially prepared ETs did possess superantigenic activity, recombinant ETs did not.[2] They speculated that the previous observations may be caused by contamination by minute quantities of other staphylococcal superantigens as has previously been shown—for example, with staphylococcal protein A.[2] The authors also argue that the ETs seem unable to bind MHC class II molecules and are even able to stimulate MHC class II deficient murine T cells.[2] Similarly, biopsies of scalded skin blisters do not show any inflammatory cells, a characteristic feature of other superantigens.

The superantigenic activity of the ETs is therefore not certain and more research is required, which must take all necessary precautions to ensure the purity of the toxins. However, we agree with Dr Qasim on the similarities of the scalded skin syndrome with other superantigen mediated syndromes, and our own work on the ETs and that of others who have used recombinant toxin preparations[3] does suggest that the toxins do possess superantigenic activity, which may have different characteristics to conventional superantigens. If this is true, the toxins may play an important part in many human dermatological and other diseases, including cutaneous T cell lymphoma, atopic dermatitis, Kawasaki disease, and psoriasis as well as sudden infant death syndrome, staphylococcal nephritis and septic arthritis, rheumatoid arthritis, multiple sclerosis, contact dermatitis, and various autoimmune diseases.

1 Tokura Y, Yagi J, O'Malley M, *et al*. Superantigenic staphylococcal exotoxins induce T cell proliferation in the presence of Langerhan cells or class II-bearing keratinocytes and stimulate keratinocytes to produce T cell-activating cytokines. *J Invest Dermatol* 1994;**102**:31–7.
2 Fleischer BD, Gerlach A, Fuhrmann A, Schmidt KH. Superantigens and pseudosuperantigens of gram-positive cocci. *Med Microbiol Immunol* 1995;**184**:1–8.
3 Vath GM, Earhart CA, Rago JV, *et al*. The structure of the superantigen exfoliative toxin A suggests a novel regulation as a serine protease. *Biochemistry* 1997;**36**:1559–66.

Raised cerebrospinal fluid glycerol concentration associated with use of dichloroacetate

EDITOR,—Treatment of inborn errors of metabolism often involves the use of chemicals that have not been subjected to rigorous drug trials. Stacpoole *et al* recently reviewed the use of dichloroacetate in congenital lactic acidises.[1] Although dichloroacetate has been used in many patients with acquired problems, the authors could only find data concerning its use in 53 patients with inborn errors. Vigilance for side effects therefore remains essential. We welcome the randomised, placebo controlled trial of dichloroacetate they are conducting, which will help to establish the safety as well as the value of the drug in this group of patients.

We have used dichloroacetate in six patients with congenital lactic acidoses (four due to pyruvate dehydrogenase deficiency and two of uncertain aetiology: one published[2]). In all cases, lactate concentrations fell but in no case was there overt clinical improvement. In one 8 year old patient, after starting dichloroacetate at 50 mg/kg/day, seizures increased, accompanied by a marked rise in the cerebrospinal fluid (CSF) glycerol concentration; the patient improved clinically and the CSF glycerol concentration fell on stopping dichloroacetate (CSF glycerol 0.13–0.14 mmol/l before and after

treatment, 0.4–1.1 mmol/l during treatment, normal < 0.15 mmol/l; CSF lactate 8.9–10.8 mmol/l before and after treatment, 6.8 mmol/l during treatment, normal 0.5–2.0 mmol/l). The blood glycerol concentration remained within the normal range, as did free fatty acid and ketone body levels in blood and CSF. This patient had presented at 3 years with myoclonic seizures and regression, leading to a spastic quadriplegia with optic atrophy; extensive studies failed to identify the aetiology. The cause of the rise in CSF glycerol is unknown and we have not encountered this problem in other patients treated with dichloroacetate. Although the features associated with congenital lactic acidoses are extremely variable, the timing of the rise in CSF glycerol suggests that it resulted from the treatment rather than the disease.

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1 Stacpoole P, Barnes C, Hurbanis M, Cannon S, Kerr D. Treatment of congenital lactic acidosis with dichloroacetate. *Arch Dis Child* 1997; 77:535–41.
2 Aynsley-Green A, Weindling AM, Soltesz G, Ross B, Jenkins PA. Dichloroacetate in the treatment of congenital lactic acidosis. *J Inherit Metab Dis* 1984;7:26.

Heavy caffeine consumption in pregnancy, smoking, and sudden infant death syndrome

EDITOR,—Ford and his colleagues in New Zealand found that consumption of ≥400 mg of caffeine during the third trimester was associated with an increased risk of sudden infant death (SIDS) months after birth.[1] Consumption of lower concentrations of caffeine were not associated with any increased risk of cot death. The lack of a dose-response relation between maternal caffeine consumption and risk of cot death should have alerted the authors to the possibility that the relation is not causal. Nevertheless, the authors proceeded to seek biological explanations for their findings. Let me offer an epidemiologist's interpretation.

SIDS is a tobacco associated disorder

The risk of SIDS has repeatedly been increased among infants exposed to parents' cigarette smoke, often in a dose-response pattern.[2 3] Thus, parents' smoking should be viewed as an important risk factor for SIDS.

Tobacco consumption measured inadequately

The authors classified maternal smoking during pregnancy as a yes/no variable. Maternal smoking during the months preceding the interview was not assessed, nor was paternal cigarette smoking.

As the greater the number of cigarettes smoked means the higher the risk of SIDS,[2 3] the authors should have measured parental (and not just maternal) cigarette smoking as a continuous variable (that is, number of cigarettes smoked in the presence of the infant each day) or perhaps as a categorical variable providing a reasonable approximation of a continuous variable (for example, 1–10, 11–20, etc).

Caffeine measured better than smoking

Caffeine consumption was assessed as a categorical variable (small, light, moderate, heavy). Because those who smoke the most cigarettes also drink the most coffee/caffeine,[4] caffeine will carry information about magnitude of cigarette smoking that was not carried by the "maternal tobacco: yes/no" variable, but should have been carried by a "parental tobacco: small, light, moderate, heavy" variable.[4–10]

The result of having better information about caffeine than about tobacco is that adjustment for tobacco will not eliminate tobacco confounding of the association between caffeine consumption and the risk of SIDS.[4 11–13]

Consider the possibility that the caffeine consumption variable tends to carry tobacco consumption information at the highest levels of caffeine consumption. During the third trimester, when caffeine degredation is slowed,[14–16] those who are able to consume ≥400 mg of caffeine/day tend to be those who smoke the most cigarettes. Thus, those women who consume the most caffeine and smoke the most cigarettes probably put their infants at risk of SIDS.

The authors have committed an epidemiological error that students of introductory epidemiology are taught to avoid. At a minimum, they should have identified in the discussion section of their paper that their failure to measure adequately one of the most important variables is a major, potential limitation.

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1 Ford RPK, Schluter PJ, Mitchell EA, Taylor BJ, Scragg R, Stewart AW, and the New Zealand Cot Death Study Group. Heavy caffeine intake in pregnancy and sudden infant death syndrome. *Arch Dis Child* 1998;**78**:9–13.
2 Golding J. Sudden infant death syndrome and parental smoking: a literature review. *Paed Perinat Epidemiol* 1997;**11**:67–77.
3 MacDorman MF, Cnattinguis S, Hoffman HJ, Kramer MS, Haglund B. Sudden infant death syndrome and smoking in the United States and Sweden. *Am J Epidemiol* 1997;**146**:249–57.
4 Morrison AS. Control of cigarette smoking in evaluating the association of coffee drinking and bladder cancer. In: MacMahon B, Sugimura T, eds. *Banbury report 17: coffee and health*. Cold Spring Harbor Laboratory, 1984: 127–34.
5 Jacobsen BK, Thelle DS. The Tromso heart study: is coffee drinking an indicator of a life style with high risk for ischemic heart disease? *Acta Med Scand* 1987;**222**:215–21.
6 Schreiber GB, Robins M, Maffeo CE, *et al*. Confounders contributing to the reported associations of coffee or caffeine with disease. *Prev Med* 1988;**17**:295–309.
7 Zavela KJ, Barnett JE, Smedi KJ, Istan JA, Matarazzo M. Concurrent use of cigarettes, alcohol and coffee. *J Appl Soc Psychol* 1990;**20**: 835–45.
8 Puccio EM, McPhillips JB, Barrett-Connor E, Ganiats TG. Clustering of atherogenic behaviors in coffee drinkers. *Am J Public Health* 1990;**80**:1310–3.
9 Leviton A, Pagano M, Allred EN, el Lozy M. Why those who drink the most coffee appear to be at increased risk of disease. A modest proposal. *Ecol Food Nutr* 1994;**31**:285–93.
10 Fortier I, Marcoux S, Brisson. Passive smoking during pregnancy and the risk of delivering a small-for-gestational-age infant. *Am J Epidemiol* 1994;**139**:294–301.
11 Savitz DA, Baron AE. Estimating and correcting for confounder misclassification. *Am J Epidemiol* 1989;**129**:1062–71.
12 Leon DA. Failed or misleading adjustment for confounding. *Lancet* 1993;**342**:479–81.
13 Leviton A. Coffee consumption and residual confounding. *Epidemiology* 1996;**7**:110–11.
14 Aldridge A, Bailey J, Neims AH. The disposition of caffeine during and after pregnancy. *Seminars in Perinatol* 1981;**5**:310–14.
15 Knutti R, Rothweiler H, Schlatter C. The effect of pregnancy on the pharmacokinetics of caffeine. *Arch Toxicol Suppl* 1982;**5**:187–92.
16 Brazier JL, Ritter J, Berland M, Khenfer D, Faucon G. Pharmacokinetics of caffeine during and after pregnancy. *Dev Pharmacol Ther* 1983; **6**:315–22.

Drs Ford and Schluter comment:

Based upon a New Zealand nationwide case control study we found that heavy caffeine consumption (≥400 mg/day) in pregnancy was associated with an increased risk of sudden infant death syndrome (SIDS) after adjusting for likely confounding factors, including smoking.[1] The adjusted odds ratio (*a*OR) for mothers who consumed heavy caffeine throughout their pregnancy was estimated at 1.65 (95% confidence interval (CI) 1.15, 2.36). However, Dr Leviton disputes this finding, claiming that our dichotomous yes/no response variable for maternal smoking over the last two weeks was inadequate and that residual confounding explained the reported association.[2] Instead, in Dr Leviton's view, the analyses should have been conducted using parental (mother and father) daily cigarette consumption measured as a continuous variable. To assure your readers that the reported prenatal caffeine effect is real and different from the effect associated with smoking, we present a supplementary analysis of our data.

- We examined the effect of heavy caffeine consumption in pregnancy on SIDS risk for *non-smoking mothers only*. Employing identical confounding variables and statistical analyses as before,[1] the *a*OR for mothers who consumed heavy caffeine throughout their pregnancy was estimated at 1.71 (95% CI 0.85, 3.45). This estimate is slightly higher and more variable (due to the smaller sample size) than that previously reported when information for all mothers was analysed together.
- We repeated the analyses previously reported,[1] but left *cigarette consumption as a continuous variable* (that is, average number of cigarettes smoked each day over the last two weeks). Replacing the dichotomous maternal smoking variable with its continuous analogue had little effect on the resultant estimate of the *a*OR for mothers who consumed heavy caffeine throughout their pregnancy, *a*OR = 1.69 (95% CI 1.17, 2.43). Similarly, the inclusion of the paternal cigarette consumption variable had little effect on this estimated adjusted relative risk (*a*OR = 1.73; 95% CI 1.19, 2.50) as did the variable combining both maternal and paternal cigarette consumption (*a*OR = 1.73; 95% CI 1.20, 2.49).

Undoubtedly, parental smoking is an important risk factor associated with SIDS. However, our analyses disclose a link between heavy caffeine consumption in pregnancy and increased risk of SIDS. This association is separate from the effect of parental smoking on SIDS risk.

1 Ford RPK, Schkiter PJ, Mitchell EA, Taylor BJ, Scragg R, Stewart AW, *et al*. Heavy caffeine intake in pregnancy and the sudden infant death syndrome. *Arch Dis Child* 1998;**78**:9–13.

BOOK REVIEWS

Imaging in Paediatrics: a Casebook. By Kieran McHugh. (Pp 221; hardback £34.95) Oxford University Press, 1997. ISBN 0 19 262776 7.

Paediatricians in training, especially those studying for their membership examinations, need to know about basic common problems in paediatric radiology. This is a question and answer book, in which a radiograph is shown on one side, with questions on the opposite page. The answers are also given, so it is easy to take a peek at them and cheat! The pictures are, for the most part, single images on which a diagnosis can be made. The opposite page contains a short text briefly describing the lesion, a pen picture of the condition, and, where relevant, further imaging that would be required radiologically to resolve a problem. At the bottom of each page there is a single or, at most, two references for further reading.

These images are produced in a matt finish form. For the most part they have been well reproduced, although it is inevitable with chest radiographs that some of the fine detail of the lung parenchyma and vascular pattern is lost, particularly in relation to neonatal chests, but this is not severe enough to prevent a diagnosis The publishers and the author are to be commended on this as it is actually quite rare to have reasonable reproduction of some of the subtleties of neonatal chest radiographs.

The book is divided into five sections covering a broad outline of conditions found in paediatric practice. Trauma has been largely excluded because this book is pitched at those studying for examinations rather than as a practical vade-mecum in day to day practice.

McHugh, in his introduction, has stated that the book would also be helpful for medical students to dip into during their paediatric rotation; I agree with this. It is a neat and succinct introduction to the major pathological conditions seen in children. It is not, and makes no attempt to be, a substitute for a textbook in paediatric radiology.

It fills a niche in the market. There are many similar textbooks available for adult radiology but this is only one of four that I know of which is about paediatric radiology, two of which were published many years ago. It will stand the test of time as the images portrayed in it are mainly plain films and these conditions do not change.

Inevitably, in reviewing books, you dip into them, checking for the presence of key conditions or, indeed, their absence. There are no major deficits in this book.

An hour spent browsing through this would be be an hour spent usefully and fruitfully and should provide some light relief for the end of a hard evening's study in the library. Having read through it, one should come away wiser and better prepared for the examinations.

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Hepatobiliary, Pancreatic and Splenic Disease in Children. Medical and Surgical Management. Edited by W F Balistreri, R Ohi, T Todani, Y Tsuchida. (Pp 605; hardback n/a). Amsterdam: Elsevier Science, 1997. ISBN 0 444 82052 3.

When three paediatric hepatobiliary surgeons of the stature of Ohi, Todani, and Tsuchida get together to write about biliary atresia, choledochal cysts, and liver tumours, respectively one can confidently expect an authoritative account of their long experience. Add excellent chapters on portal hypertension (Howard), liver trauma (Garcia), and a series of good chapters on surgical aspects of the pancreas and one has a book which I am pleased to have on my shelf.

It dropped onto my desk just as I was feeling in need of continuing medical education about Schwachman's syndrome. How frequently should we do a bone marrow examination to detect early malignancy? I could not find the answer. Indeed, I could not find more than two passing references to Schwachman's syndrome. This exemplifies the limitation of this book—its coverage is patchy, it is better on the surgical than on the medical, and it cannot be relied upon to help out in an hour of need.

A particularly galling fact for the editor of a text on paediatric hepatology is that the subject just will not stand still. Between submission to the publisher (1995 perhaps, as judged by the latest references?) and now, paediatric hepatologists have discovered molecular biology. Insight into the mechanisms of Alagille's syndrome, Byler's syndrome, and Wilson's disease have tumbled out but too recently for this book.

My copy of this book will be annotated before being lent to a trainee. I would not wish that trainee to believe that percutaneous liver biopsy is reliable in diagnosing biliary atresia in 85–95% of cases, that Wilson's disease is part of the differential diagnosis of neonatal cholestasis, that copper stains will always be positive in Wilson's disease, or that tyrosinaemia should only be suspected if plasma tyrosine is raised. I will, however, ask my trainee to read Onishi's chapter on bilirubin metabolism to find out why breast milk jaundice is not, after all, a design fault but really a rather good idea.

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Kendig's Disorders of the Respiratory Tract in Children. 6th edition. Edited by V Chesnick, T Boat. (Pp 1214; hardback n/a). WB Saunders, 1998. ISBN 0 7216 6541 1.

When faced with a child with an unusual or difficult respiratory problem, the first reference text many budding paediatric pulmonologists turn to is Kendig's excellent and comprehensive *Disorders of the Respiratory Tract in Children*. First published in 1967, this book covers lung development and physiology, investigation of the respiratory tract (including pulmonary function testing) and detailed descriptions of both common and rare paediatric respiratory disorders. The 1998, 6th edition boasts a new editor, Thomas Boat, as well as 30 new authors and six new chapters. All but six of the 100 or so contributors come from North America (only one is from Europe) and this heavy North American bias is reflected in the style and content of the book, especially in the numbers of investigations suggested for some clinical problems.

The editors have done a good job of maintaining a uniform style throughout the book and repetition in different sections has largely been avoided. Many of the chapters from the 5th edition have been updated and contain extensive bibliographies (referenced up to 1996), now usefully divided in some chapters by subject headings. The major chapters on asthma and cystic fibrosis reflect many of the recent advances made in understanding the pathogenesis and genetics of these disorders. The importance of molecular biology is also reflected in the inclusion of a new chapter on molecular determinants of lung development, although the depth of knowledge assumed by the authors varies from one paragraph to the next thus making the text difficult to follow at times. In other areas the book is largely unchanged and the quality of the chest radiographs in some sections is disappointing.

On the whole, Kendig's remains a valuable reference textbook and, as the editors modestly state in the preface, it has gained the reputation of being the "bible" in paediatric lung disease—at least in North America. The 6th edition maintains that tradition of excellence.

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Self-assessment for the Diploma in Child Health. By W-C Leung, A Minford. (Pp201; £14.99). Arnold, 1997. ISBN 0 340 67720 1.

The diploma in child health (DCH) is allegedly the most difficult of the several diplomas in clinical medicine offered by the Royal Colleges. A senior colleague remarked that the DCH has a "significant failure rate" and is "really a mini-membership exam". As such, it demands a deal of respect.

Most candidates for the DCH are general practitioner trainees, of whom the majority will have had at most a six month senior house officer post in hospital paediatrics. Thus, many candidates come to the DCH with a shortfall in experience of community paediatrics, with little teaching dedicated to "DCH style" topics, and with variable advice on suitable reading lists.As the DCH only has two sittings each year, it is likely that by the time of the examination, the candidate will no longer be working in paediatrics. For many, it is their first experience of a rigorous postgraduate examination.

These are the problems. The authors have produced a compact and functional book which claims to be the only revision book specifically for the DCH. Having sat the examination in 1998, I can readily verify that the questions are convincingly of the "College style" and the formats are accurate reproductions.

With one mock examination presented after another (five in all), the book is clearly not a browser. The model answers to the questions are annotated and concise—as indeed they need to be. The authors rightly emphasise that all parts of the written papers are compulsory and that correct allocation of time under pressure is essential. For the candidate early in his revision, however, there is no referencing of the answers for further reading. Indeed the matter of a bibliography is peculiarly avoided altogether.

In the written paper it is essential to get "on the right wavelength" of the question and then, in response, to throw the net as widely as possible. The discussion must be broadened beyond hospital paediatrics or else many marks stand to be lost. The syllabus of the DCH is extremely broad but my own tips are: (1) be spot on with paediatric emergencies; (2) remember parents' consent; and (3) be aware of the possibility of child abuse and non-accidental injury. Child protection laws and procedures and the exact roles of the "multidisciplinary team" require specific research and memorisation. Advice on how to answer multiple choice questions is hackneyed but most authorities advise the "play your hunches" approach.

Of course, the DCH has a separate clinical examination about which this book offers detailed and practical advice, but does so without diagrams or colour plates. A well constructed table of developmental milestones is given, as is a useful algorithm for the inevitable cardiovascular short case.

Overall, it is a well priced and practical book which would be invaluable in the final weeks of revision for the DCH written papers. Its mock tests are faithful and its model answers are thorough and accurate.

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Cancer in Children. 4th edition. Edited by P A Voute, C Kalifa, A Barratt. (Pp 359; hardback £49.95) Oxford Medical Publications, 1988. ISBN 0 19 262897 6.

Over the past 24 years since the first edition of this text, paediatric oncology has changed dramatically. For most children with cancer, survival was then uncertain, treatment largely empirical, and the medical profession was not too concerned about late effects—we were only too happy to have anyone in the long term follow up clinic. The revolutionary advance in cytogenetics and molecular genetics, our ever increasing understanding of cellular mechanisms of differentiation and apoptosis, coupled with application of pharmacodynamics and kinetics to protocol design, have all occurred, and have been gradually incorporated into successive editions of this text. Perhaps the greatest irony is that the biggest leap forward in our understanding of cellular mechanisms has occurred in the six years since the 3rd edition of this book, and yet there have been only modest advances in survival for patients with most of the common childhood cancers, at least in the economically developed world. In short, understanding has not yet translated into cure—the cancer cell is a more complex entity than we naively thought a decade ago. Herein lies a problem for a short text aimed to whet the appetite of newcomers to the specialty. It has to be concise, hence didactic, and yet try to contain as much as books several times its size. Forty authors are named for a volume of 347 pages—the motivation for the writers is clearly not financial!

Inevitably, there are troughs and peaks in this text: selected and somewhat biased bibliographies and a tendency to promote partisan concepts of treatment aspects rather than overall concepts and summaries of approaches, particularly in the chapters relating to specific tumours. In such texts is there really a place for specific protocols? Trainees need guidance about different approaches not flow diagrams of the author's favourite protocol.

Given its relatively modest price and its backing by the International Society of Paediatric Oncology, it will undoubtedly have a wide audience. Earlier editions adorn most book shelves of European oncologists—you can age the person by the edition they have on display. What is difficult to know is the half life of its actual use.

In 1998, the greatest challenges in paediatric oncology are to translate our understanding of cellular mechanisms into more targeted treatment with fewer long term side effects; and to help those in developing countries to share in the advances. To achieve the latter the basic principles of treatment must be teased out and applied.

There is a real conflict between the high technology of the West and having no money to do anything in the developing world. In the next edition, paediatric oncology in the developing world will surely feature more prominently.

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Abdominal Surgery of Infancy and Childhood. Volumes 1 and 2. Edited by W L Donnell, K Kimura, J Schafer, J White. (£225). Harwood Academic Publishers, 1996. ISBN 3 7186 5409 1.

Paediatric surgery has changed dramatically over the past 10 years. The publication of another voluminous textbook reflects the expansion of this subject. The remit of this text is restricted to surgery of the abdomen, which is more limited in scope than other texts. However, it does not compensate by providing greater depth or detail.

A number of chapters discuss changes in the specialty (for example, laparoscopy) and are concise, well written, informative, with good diagrams, and up to date references. Alas, many chapters regurgitate old theories and time honoured beliefs and methods without sufficient reference to more recent and alternative approaches. Even allowing for the lag time between writing a textbook and its publication, this edition appears remarkably obsolete. New developments in wound healing, fetal surgery, molecular biology, chromosomal markers, and new understandings in diaphragmatic hernias are either omitted or skimmed over.

The book is generally well illustrated with high quality diagrams and photographs (although pictures of the redcurrant jelly stool of intussusception and bile stained vomitus of obstruction lose their impact in black and white!). It also suffers the fate of many multiple authored tomes, of having an inconsistent style of writing, unnecessary duplication, and occasional contradictory information.

Any new edition of a textbook is an opportunity to approach the subject in a fresh and novel manner; unfortunately, this has not happened and I found the book uninspiring and disappointing. It remains, however, a useful reference book, if somewhat historical.

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