LETTER TO THE EDITOR

Rabies in the accident and emergency department

EDITOR,—We wish to report on a patient with rapidly fatal rabies who presented to our accident and emergency department.This is the only reported fatality from this disease in the United Kingdom since 1988.With increasing worldwide travel, rabies has the potential to present to hospitals in the United Kingdom. Awareness of this condition is required, particularly when assessing an unusual illness in a patient who has recently been in a rabies endemic zone.

An 18 year old Nigerian student, who had returned from Nigeria three weeks previously, attended with sudden onset of difficulty in breathing. This followed three days of malaise and fatigue. He was unable to stand and walk or to get on to the trolley unaided. He had been previously well and was not taking any long term medication. On examination, he appeared anxious and agitated, but not obtunded. Vital sign measurements showed that he was afebrile, normotensive but tachypnoeic. Oxygen saturation was 99% on room air. There was no specific abnormalities on system examination.

Investigations revealed glycosuria, proteinuria, ketonuria, hyperglycaemia (blood glucose 10.9 mmol/l) and respiratory alkalosis. Blood counts and a haemoglobinopathy screen were normal. A blood smear showed scanty *Plasmodium falciparum* parasitaemia. Blood culture subsequently grew *Neisseria species*. Initial differential diagnoses included cerebral malaria and possible substance misuse.

After admission, however, features of rabies were noted, including drooling of saliva, hydrophobia,and painful generalised spasms. He was subsequently transferred to a regional infectious diseases unit and died shortly after arrival. A postmortem examination confirmed the diagnosis of rabies. All hospital personnel actively involved in his management were offered and accepted rabies immunisation, without any adverse sequelae.

In this patient, a history of dog bite on the foot was only obtained in retrospect, as it had occurred several months ago. This is often the case with long incubation periods associated with a low dose of inoculum and preliminary infection of the muscles at the site of the bite before spread to peripheral nerves.[1]

This patient presented with the commoner furious form of the disease, associated with hyperactivity, bizarre behaviour, hallucinations, aggression, and generalised spasms. There is a less common paralytic variety that presents with acute ascending flaccid paralysis mimicking Guillain-Barre Syndrome. Once a diagnosis is suspected, specialist virological opinion should be sought. Supportive management and barrier nursing should be instituted. Personnel who have been bitten, or licked by the patient on mucosae or open wounds, require post-exposure antirabies prophylaxis. The outlook remains dismal with only four survivors reported in the world literature.

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1 Charlton KM, Nadin-Davis S,Casey GA, *et al*. The long incubation period in rabies:delayed progression of infection in muscle at the site of exposure. *Acta Neuropathol* 1997;**94**:73–7.

BOOK REVIEWS

The Telemedicine Tool Kit; A workbook for NHS doctors, nurses and managers. By Roy Lilley and John Navein. (Pp 185; £30.00.) Radcliffe Medical Press, 2000. ISBN 1-85775-4808.

This is a 180 page A4 softback book with lots of big type, boxes and icons that aims to "demystify the subject . . . and help you implement your own telemedicine projects". The authors are well qualified, combining expertise in management, remote health care and real life telemedicine projects, which gives them a credibility sometimes lacking in other writers on this subject. As they freely admit, to produce a book on telemedicine is a little anachronistic, but while a CD ROM might seem more appropriate the book actually has the feel of an electronic publication, both in its style and the use of various symbols, text boxes and layouts.

The Telemedicine Tool Kit is written from the perspective of medicine in general, rather than accident and emergency (A&E), though most of the content will be directly relevant to developments in A&E, and there are even one or two appropriate examples, such as call to needle times. It is designed to stimulate thought and debate with colleagues, rather than be prescriptive about the way in which telemedicine should be implemented. This makes it very different to the other major UK book on the subject,[1] which provides a solid introduction and factual approach. *The Telemedicine Tool Kit* does contain facts, but these are selected to engage and challenge the reader, rather than cover the topic comprehensively.

In attempting to engender enthusiasm and stimulate debate this publication is likely to succeed. It also takes care to emphasise some important principles that are essential to the implementation of telemedicine and touches on a number of related topics, such as current telecommunications and the internet. Most importantly, it devotes a large section to describing a series of steps that can be followed to develop a thriving telemedicine initiative.

Despite all this, the style of the book is somewhat off putting. In an attempt to achieve readability and humour it sometimes seems just a little too smug. It seems doubtful that readers will find themselves filling in the "exercise" boxes that pepper the text, or making a coffee when they are told to. For telemedicine enthusiasts the endless upbeat character may reinforce a feeling that telemedicine is obviously right and easy, but the unconvinced may be discouraged by subheadings such as "risk management for technophobes and sceptics". Constant references to "propeller heads" (presumably men with technical expertise and pony tails) and an unremitting jocularity acts to obscure rather than emphasise the underlying message.

Does telemedicine need a tool kit, or indeed a workbook? The latter concept has too many schooldays connotations to appeal. There is, however, no doubt that telemedicine requires good publications to help those who are thinking of adopting the technique in their own practice. This book is useful, thought provoking and well informed, yet its attempts to simplify and enthuse actually detract from its ultimate readability. It is easy to dip into but harder to read; at best it will inform and enthuse, at worst it will irritate and alienate.

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1 Wootton R, Craig J. *Introduction to telemedicine*. London: Royal Society of Medicine Press, 1999.

Resuscitation Rules. By Tim Hodgetts and Nick Castle. (Pp 116; £13.95.) BMJ Publishing Group, 1999. ISBN 0-7279-1371-9.

Very few medical books claim to be "designed to make learning fun"— most seem to have been designed to make sleeping easy. As a result any book making such claims might benefit from readers' previous experience and low expectations. *Resuscitation Rules* achieves its authors' intentions with a little to spare. The approach is that of an ALS instructor: friendly and non-threatening but intent on getting the information over.

The "rules" are 60 phrases, covering basic life support, advanced life support, medical emergencies and paediatric resuscitation. Each rule has up to two small pages of text and accompanying references providing the evidence for the rule. The determination of the authors to present the evidence for each rule is both a strength and a weakness. Firm believers in evidence-based medicine will warm to this, but sceptics may be put off. At times the tone becomes rather po-faced, however any reader wanting to investigate further has an easy starting point.

Resuscitation Rules is the successor to *Trauma Rules*[1] and follows the same format. While almost all of the latter's rules come across naturally, a number in the new book seem forced. The text is easy to read and the rules well argued. The book is ideal for reading in a spare 10 minutes or in short bursts covering three or four rules at a time.

This book is not suitable for newcomers to emergency medicine and the resuscitation room, nor is it aimed at them. The reader must have a reasonable level of knowledge at the start, to appreciate the reason for a rule's existence, and although a lot of basic information is present, it is not in an order easily accessible to the novice. This is clear from the authors' foreword but not from the blurb on the back of the book. This is presumably a ploy on the part of the publishers to increase sales. The experienced reader will find their memories jogged and may be stimulated into more in depth reading. The group that will find the book of most use are teachers and instructors. Many of the rules can be worked into teaching sessions as memory hooks for the students, and the answer to the "awkward question", as well as the evidence, may be within.

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1 Hodgetts T, Deane S, Gunning K. *Trauma rules*. London: BMJ Publishing Group, 1997.

Pre-hospital Medicine: The Principles and Practice of Immediate Care. Edited by I Greaves and K Porter. (Pp 806; £145.00.) Arnold, 1999. ISBN 0-340-67656-6.

This book aims to fill a gap in the current range of pre-hospital texts. There is not a current reference work for pre-hospital management as previous books have mainly been aimed at pocket sized "How to Do It" guides.

This book boasts an impressive list of authors with the index reading like a "Who's Who" of UK pre-hospital and emergency care and is comprehensive in its coverage of the subject. The format is very readable, there are enough illustrations to add interest to the text and there are line diagrams where appropriate. Key clinical tips are emphasised by shaded boxes within the text.

The editors have achieved the correct balance between background information and practical advice, with each chapter starting with the theoretical, yet ending with the practical. The amount of referencing is about right, with enough further reading for anyone interested to delve deeper into the subject.

I particularly liked the vigorous de-bunking given to some medical myths in the hypothermia section and the clarity of both text and illustrations in the "Understanding the electrocardiogram" section. As always there is a tendency to move away from a strictly pre-hospital information. (I doubt whether Symmond's test will be utilised by many pre-hospital care practitioners). However, blurring the boundaries between pre-hospital and inhospital treatment to provide a continuum of care is probably a very good idea.

I was surprised to see that the section on "Immobilisation and extrication" had no information about the theory or practice of extrication. It is vital that medical staff speak the same language as the fire service and know both the advantage and limitations of different methods of extrication so that an appropriate synthesis of medical and physical rescue can be made. However, there are already good books on this subject.

The clinical content is right up to date and I am sure that, if this is maintained by frequent editions, this book will become the standard reference work for pre-hospital medicine.

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Children's Fractures. By Anna Thornton and Catherine Gyll. (Pp 208; £39.95.) W B Saunders, 1999. ISBN 0-7020-2164-4.

Reading radiographs is one of the many skills senior house officers (SHOs) learn in accident and emergency (A&E). One of the more difficult aspects of radiological interpretation is that of children's radiographs. As the authors state the young doctor in the A&E department has only a sketchy idea of how very different children's fractures are from adults. The growing skeleton and the different nature of the bones make the nature of the injuries different and their interpretation very difficult. This book goes a long way to solving this conundrum.

The general idea behind the book is superb and its execution is in the main adequate. Minor criticisms revolve around the size of the illustrations but one understands the dilemma having pictures big enough to be seen and yet cramming enough pictures in to make the book achieve its ideas.

I would, however, take issue with some of the recommendations for radiology. For instance, I would find it unacceptable not to have the joint above and below a forearm fracture radiographed. It is not unusual for pain to be referred from the elbow to the wrist and vice versa. Failure to radiograph the full arm would mean that as a consequence injuries will be missed on occasion. I would also take issue for the need of only one view in children under 2 years of age, even if a fracture is positive.

With regard to pulled elbow, our orthopaedic surgeons would be very cross if we referred every pulled elbow to them as is suggested.

Finally, while a number of people have been consulted, it is a pity that there is no consultant in A&E medicine in the list of those who helped. This is all the more so as this book will be of most use to those in A&E.

These are minor criticisms however, as the overall conception and design of the book is excellent. In particular I think the epidemiology of paediatric fractures and the list of references at the end are a tremendous addition, which are frequently missing from books of this nature.

It is difficult to know who would benefit most from this book as there is something in it for everyone. I can see myself showing it to my nurse practitioners as both a learning and re-education tool. Definitely the SHOs will benefit from having it available. The references at the back will make it easier for the specialist registrars to do their research and I am sure that I will still continue to refer to it from time to time.

I would recommend this book thoroughly, and perhaps for future editions (and I am sure there will be several editions) I would recommend that the authors take the minor criticisms on board.

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Current Practice in Critical Illness. Vol III. By David W Ryan. (Pp 213; £39.50.) Arnold, 1998. ISBN 0-412-79300-8.

This book is the third in a series that has been written with the aim of providing an essential reference source for all specialists working with the critically ill. Part of the blurb indicates that the series is to be authoritative, comprehensive and with commentaries from internationally respected clinicians. A fourth volume is in preparation.

These books are nicely produced with easy to read print on good quality paper. Illustrations are few but those that there are, are relevant to the text. As with many publications the quality of radiographic images is less than ideal.

There are eight different topics covered in the book of which four will be of general interest to emergency physicians. These include a review of the "Airway in neonates and children", "Trauma resuscitation", "Transoesophageal echocardiography", and "Hypertensive crisis". Each of these chapters is precise authoritative, well written and offers a broad contemporary view and update for busy clinicians.

I like this book even though only half of it is of direct interest. It is not the sort of book I would recommend buying for an emergency department library but if you can beg, steal or borrow a copy from a colleague or obtain it from a larger library then it is well worth looking at. It is of particular interest for experienced clinicians or for the more discerning trainee. A perusal of the contents of the previous two volumes shows an equally eclectic range of topics. It is my view that this third volume is probably the most relevant to the emergency department. It is a good read.

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