

# PostScript

## LETTERS

### Calcium for hyperkalaemia in digoxin toxicity

In their article on the management of hyperkalemia<sup>1</sup> Dr Ahee and Dr Crowe recommend, "hyperkalaemic patients taking digoxin should be given calcium as a slow infusion over 20 to 30 minutes". I would caution against this advice.

Hyperkalaemia is usual in acute digoxin toxicity, and not uncommon in chronic digoxin poisoning. Additionally, because it undergoes significant renal clearance, digoxin toxicity is probable in a patient with acute renal failure. Therefore, patients taking digoxin who present with ECG changes and hyperkalaemia should be considered digi-toxic.

It is widely held (though at times hotly debated<sup>2,3</sup>) that calcium administered in the setting of digoxin toxicity will probably induce arrhythmia or cardiac arrest. Immediate reversal of digoxin toxicity with digoxin antibody (Fab) fragments will rapidly reduce the serum potassium and is the treatment of choice. In the absence of Fab fragments, treatment with magnesium sulphate rather than calcium should be considered. Magnesium sulphate has been shown to be effective for digoxin induced arrhythmias<sup>4</sup> and there is laboratory, and some clinical evidence to suggest that magnesium exerts similar effects to that of calcium on the trans-membrane potential in the setting of hyperkalaemia<sup>5</sup>.

**M Davey**

Emergency Department, Royal Adelaide Hospital, Adelaide, South Australia; mdavey@mail.rah.sa.gov.au

### References

- 1 Ahee P, Crowe AV. The management of hyperkalemia in the emergency department. *J Accid Emerg Med* 2000;17:188-91.
- 2 Kuhn M. Digoxin, hyperkalemia and kidney failure. [Letter]. *Ann Emerg Med* 1997;29:695-6.
- 3 Jain A, Lin S. Digoxin, hyperkalemia and kidney failure. [Letter]. *Ann Emerg Med* 1997;29:696.

If you have a burning desire to respond to a paper published in *EMJ*, why not make use of our "rapid response" option?

Log on to our web site ([www.emjonline.com](http://www.emjonline.com)), find the paper that interests you, and send your response via email by clicking on the "eLetters" option in the box at the top right hand corner.

Providing it isn't libellous or obscene, it will be posted within seven days. You can retrieve it by clicking on "read eLetters" on our homepage. The editors will decide as before whether to also publish it in a future paper issue.

- 4 Spector M, Schweizer E, Goldman R. Studies on magnesium's mechanism of action in digitalis-induced arrhythmias. *Circulation* 1975;52:1001-5.
- 5 Davey M, Kuhn M. Slow-release potassium overdose: Is there a role for magnesium? *Emergency Medicine* 1999;11:263-71.

### What about patient satisfaction following acute ankle sprains?

Investigation of the effectiveness of double Tubigrip for acute grade 1 and 2 ankle sprains through a randomised controlled trial is commendable.<sup>1</sup> However, I feel compelled to comment on aspects of this study. It is interesting that 85 (17.5%) of the 485 patients approached to take part in this study expressed a treatment preference and therefore were not randomised. Given that only 197 patients completed the study, the 85 expressing a treatment preference is equivalent to a third arm of the study. The implication of their reluctance is that patients attending the accident and emergency (A&E) department after ankle injuries expect and want treatment. This confirms what is a commonly held belief in the A&E department—that a double Tubigrip, or some other treatment option is supportive to the patient. While this support may not be of a physical nature, it probably leads to improved patient satisfaction. To that end, I would suggest that the addition of a "patient preference" limb to the study would be as important as the existing two limbs.

It is equally interesting that the authors did not measure patient satisfaction as an outcome in this study. One important facet of any clinical treatment is that it is acceptable to patients—and the application or not of a double Tubigrip after ankle sprain is no exception. Although the authors found the application of a double Tubigrip did not shorten recovery time or number of days off work, it would be helpful to identify whether patient preference and satisfaction would have affected outcome, both in terms of actual recovery time, but also during the recovery period itself.

While in agreement that patient education might reduce reliance on this type of treatment, in the context of a busy A&E department, this may not be practical, and the current approach probably provides efficient patient satisfaction.

**S Mason**

Accident and Emergency Department, Northern General Hospital, Herries Road, Sheffield S5 7AU, UK

### References

- 1 Watts BL, Armstrong B. A randomised controlled trial to determine the effectiveness of double Tubigrip in grade 1 and 2 (mild to moderate) ankle sprains. *Emerg Med J* 2001;18:46-50.

### Author's reply

We thank Miss Mason for her comments on our paper.<sup>1</sup> Firstly, we certainly agree that the investigation of patient preference for a treatment is an important and interesting factor in a study such as ours and indeed we set out to include this group in our research. Patients who expressed a treatment preference and agreed to the follow up telephone questionnaire were enrolled and were given the treatment of their choice. The aim was to compare their outcomes and satisfaction scores (see below) with those who were randomised to treatment. However, because of a communication error at one of the study sites, a large number of the preference group were not followed up, making comparison with the randomised group impossible.

Secondly, we did attempt to measure patient satisfaction as an outcome measure in our study. Patients were asked how strong their preference for treatment with or without a double Tubigrip bandage was on enrolment, using a 0 (no preference) to 10 (very strong preference) scale. When telephoned a week after entry, patients were asked to rate their overall satisfaction with the treatment they had received from 1 (very dissatisfied) to 10 (very satisfied). However, when we came to analyse the data we found that both these questions were poorly answered and we therefore did not include this information in our final paper. The raw results are shown in table 1.

It would seem from these raw data that of those patients who expressed a treatment preference (while agreeing to randomisation), the majority would have preferred to be treated with a double Tubigrip bandage, as expected by most clinicians. However, when asked to rate their overall satisfaction with treatment, there is no difference between the groups.

We feel that provided patients are given comprehensive information about their injury and what they should do to hasten recovery, satisfaction can be maintained without the reflex application of a bandage that adds nothing to recovery and may increase the need for analgesia.

**B Watts**

Accident and Emergency Department, Queen Alexandra Hospital, Portsmouth, Hampshire PO6 3LY, UK

### References

- 1 Watts BL, Armstrong B. A randomised controlled trial to determine the effectiveness of double Tubigrip in grade 1 and 2 (mild to moderate) ankle sprains. *Emerg Med J* 2001;18:46-50.

**Table 1**

	DTG group	No DTG group
Preference for DTG (%)	73 (76.8)	77 (77.8)
Preference for No DTG (%)	22 (23.2)	22 (22.2)
Satisfaction score (average)	8.2	8.2

## Two cases of near asphyxiation in children, using non-releasing plastic garden ties

We read with interest the emergency casebook featuring two cases of near asphyxiation.<sup>1</sup> It is our practice to admit all cases of near strangulation who present early with signs or symptoms in keeping with the history for a period of observation. We adopt this policy on the basis that it is possible to miss occult, significant upper airway pathology in victims of near strangulation<sup>2</sup> and airway obstruction can present as late as 36 hours after such an event.<sup>3</sup> In addition it is possible to overlook visual impairment in such patients as subtle changes in visual acuity may not initially be apparent.<sup>4</sup> Cases of near asphyxiation in children are not widely reported in the literature and therefore it is difficult to have an evidence based admission/discharge policy. Are we being over cautious?

**R E McLaughlin, A Stewart**

Emergency Medicine, Royal Victoria Hospital, Grosvenor Road, Belfast BT12 6BA, N Ireland

### References

- 1 **Makwana M**, Evans HM, Moore D, *et al*. Two cases of near asphyxiation in children, using non-releasing plastic garden ties. *Emerg Med J* 2001;**18**:229–30.
- 2 **Stanley RB**, Hanson DG. Manual strangulation injuries to the larynx. *Arch Otolaryngol* 1982;**109**:44–7.
- 3 **Kuriloff DB**, Pincus RL. Delayed airway obstruction and neck abscess following manual strangulation injury. *Ann Otol Rhinol Laryngol* 1989;**98**:824–7.
- 4 **Baldwin GA**, Macnab AJ, McCormick AQ. Visual loss following traumatic asphyxia in children. *J Trauma Injury Infect Crit Care* 1988;**28**:557–8.

### Author's reply

We agree entirely, the experience with asphyxiation in children is limited and therefore there is no evidence base as to what is the most appropriate admission/discharge policy. At the Birmingham Children's Hospital we are fortunate in being able to observe less sick children in an accident and emergency based observation bay, in case they get delayed respiratory symptoms, and therefore do not need to admit many children to the paediatric wards.

We were interested to note the reference to subtle changes in visual acuity by Baldwin *et al*.<sup>1</sup> This suggests it would be wise to consider visual acuity testing a few weeks after such an incident and we would certainly look towards arranging ophthalmological follow up with these patients in the future.

**N Makwana**

Royal Wolverhampton NHS Trust, Wolverhampton, UK

### Reference

- 1 **Baldwin GA**, Macnab AJ, McCormick AQ. Visual loss following traumatic asphyxia in children. *J Trauma Injury Infect Crit Care* 1988;**28**:557–8.

## Tuberculous osteomyelitis

Yuen and Tung describe a case of tuberculous osteomyelitis of the foot<sup>1</sup> and the potential difficulties in making the diagnosis. The authors were fortunate enough to have typical histological biopsy findings that subsequently cultured *Mycobacterium tuberculosis* (TB), providing diagnostic confirmation and estimations of sensitivities. However, in many

instances, the diagnosis of tuberculosis is difficult to verify. For instance, acid fast bacilli may not be identified on biopsy or may be non-tuberculous in origin. Additionally, subsequent culture confirmation can take several weeks or may fail completely, because of the fastidious nature of TB.

Although the reliance on clinical suspicion is the basis for the diagnosis of many cases of TB, definitive confirmation is desirable in view of the long term nature of treatment. It is also important to ensure that the organism is not resistant to the chemotherapeutic regimen being used, particularly with the increasing incidence of multidrug resistant TB strains. A number of novel diagnostic techniques have been developed to facilitate this. The use of the polymerase chain reaction to amplify specific TB DNA sequences permits a rapid confirmation of the diagnosis and an estimation of drug sensitivity.<sup>2</sup> These techniques have been successfully used on both clinical specimens and culture material.<sup>3</sup> Thus, acid fast bacilli can rapidly be identified as *Mycobacterium tuberculosis* and an estimation of rifampicin sensitivity can be obtained in a matter of days, free from the constraints of waiting up to several weeks for the standard culture to grow. These techniques should therefore be considered, particularly if the clinical findings are subtle or atypical.

**T B L Ho**

Infectious Diseases and Microbiology Department, Imperial College of Medicine, Norfolk Place, London W2 1PG; t.ho@ic.ac.uk

### References

- 1 **Yuen MC**, Tung WK. An uncommon cause of foot ulcer: tuberculous osteomyelitis. *Emerg Med J* 2001;**18**:140–1.
- 2 **Telenti A**, Imboden P, Marchesi F, *et al*. Detection of rifampicin-resistance mutations in *Mycobacterium tuberculosis*. *Lancet* 1993;**341**:647–50.
- 3 **Shah S**, Miller A, Mastellone A, *et al*. Rapid diagnosis of tuberculosis in various biopsy and body fluid specimens by the AMPLICOR *Mycobacterium tuberculosis* polymerase chain reaction test. *Chest* 1998;**113**:1190–4.

### Authors' reply

We thank Dr Ho for his comment on our article reporting a young patient with tuberculous osteomyelitis.<sup>1</sup> We wrote the article from the perspective of emergency medicine. Although polymerase chain reaction (PCR) is a good adjunct to microbiological culture for diagnosing mycobacterium tuberculosis, it is not available to the majority of emergency physicians in Hong Kong. None the less, we should discuss it briefly so that our article is more informative to readers.

Without argument, PCR provides an opportunity for early diagnosis and treatment. However, we should also note the limitation of the PCR especially when the PCR result is negative.

In 1998 Shah *et al* reported the accuracy of the AMPLICOR PCR test in diagnosing mycobacterium tuberculosis in tissue and body fluid specimens.<sup>2</sup> In this study, culture proof was adopted as the gold standard for diagnosing tuberculosis. Although 1032 patients were included in this study, only 34 specimens were positive for tuberculosis. Therefore, the sample size was too small and the 95% confidence interval of the sensitivity was too wide to suggest that PCR would not miss the diagnosis of mycobacterium tuberculosis. In this study, the PCR had a sensitivity of 76.4%, a specificity of 99.8% when results were compared with the gold standard. With the high specificity, PCR

is a good "rule in" test. However, PCR should not be used as a "rule out" test because of the high false negative rate.

In 2000 Lim *et al* reported the accuracy of the AMPLICOR PCR test in diagnosing pulmonary tuberculosis in smear negative respiratory tract specimens. Once again, the PCR test had a low sensitivity of 44% and a high specificity of 99%.<sup>3</sup>

With evidence from both studies, a positive PCR test result facilitates early diagnosis, but a negative PCR test result cannot exclude mycobacterium tuberculosis. At the moment, microbiological culture remains the gold standard for diagnosing tuberculosis and a high index of suspicion for tuberculosis is the key to diagnosis.

**M C Yuen, W K Tung**

Accident and Emergency Department, Kwong Wah Hospital, 25 Waterloo Road, Kowloon, Hong Kong

### References

- 1 **Yuen MC**, Tung WK. An uncommon cause of foot ulcer: tuberculous osteomyelitis. *Emerg Med J* 2001;**18**:140–1.
- 2 **Shah S**, Miller A, Mastellone A, *et al*. Rapid diagnosis of tuberculosis in various biopsy and body fluid specimens by the AMPLICOR mycobacterium tuberculosis polymerase chain reaction test. *Chest* 1998;**113**:1190–4.
- 3 **Lim TK**, Gough A, Chin NK, *et al*. Relationship between estimated pretest probability and accuracy of automated mycobacterium tuberculosis assay in smear-negative pulmonary tuberculosis. *Chest* 2000;**118**:641–7.

## Journal clubs in clinical medicine

Journal clubs in clinical medicine have long been recognised as a useful tool for keeping up to date with new developments.<sup>1</sup> More recently they have been used as a tool for the teaching of critical appraisal,<sup>2</sup> which for emergency medicine trainees in the UK is an important part of their final fellowship examination.

Since the inception of our journal club<sup>3</sup> we have noticed a subtle change in both the quality and quantity of papers in the journals that we chose to review. This made it more difficult to combine both the educational value of critical appraisal and keeping up to date with the relevant advances in our speciality so that we can apply this to our practice of evidence based medicine.

To address this we undertook to review our choice of journals to try to increase our yield of relevant articles. After finding a complete journal list from Medline a consensus opinion was reached on the basis of relevance to practice, past experience of quality of papers, and personal choice. The number of times per year that the journals, or groups of journals, are reviewed depends on the number of issues per year and the likelihood of finding papers relevant to emergency medicine in them.

The complete list of journals and their review rates is shown in table 1.

We believe that all departments with a journal club should regularly revise their selection of journals in order to increase the value of this important educational process.

**S R Jones, M M Harrison, I W F Crawford, B Ali, E Beattie, S Carley, M Davies, A Ghosh, B Martin, H Paul, R Boyd, K Mackway-Jones, R J Morton**

Department of Emergency Medicine, Manchester Royal Infirmary, Oxford Road, Manchester M13 9WL, UK

Correspondence to: Professor K Mackway-Jones

**Table 1** Frequency of journal review

Journal	Reviews per year
Academic Emergency Medicine	4
Annals of Emergency Medicine	4
British Medical Journal	4
Lancet	4
Medical journals (Archives of Internal Medicine, Annals of Internal Medicine, Clinical Medicine, Chest, Cardiology, Circulation, etc)	4
New England Journal of Medicine	4
Paediatric Journals (Archives of Disease in Childhood, Pediatric Emergency Care, etc)	4
American Journal of Emergency Medicine	3
Emergency Medicine Journal	3
JAMA	3
Intensive care journals (Anaesthesia and Intensive Care, Critical Care Medicine, Intensive Care Medicine, etc)	2
Journal of Trauma	2
Resuscitation	2
Anaesthetic journals (Anaesthesia, Anaesthesia and Intensive Care, British Journal of Anaesthesia, etc)	1
Burns	1
European Journal of Emergency Medicine	1
Injury	1
Injury Prevention	1
Nursing journals (Accident and Emergency Nursing, Emergency Nurse, Journal of Emergency Nursing, etc)	1
Sports journals (American Journal of Sports Medicine, British Journal of Sports Medicine, etc)	1

## References

- 1 **Linzer M.** The journal club and medical education: over one hundred years of unrecorded history. *Postgrad Med J* 1987;**63**: 475–478.
- 2 **Jouriles NJ, Cordell WH, Martin DR, et al.** Emergency medicine journal clubs. *Acad Emerg Med* 2001;**3**:872–8.
- 3 **Carley SD, Mackway-Jones K, Jones A, et al.** Moving towards evidence based emergency medicine: use of a structured critical appraisal journal club. *J Accid Emerg Med* 1998;**15**:220–2.

## A misdiagnosed fracture of the calcaneum

I am writing in response to the interesting case report of “A misdiagnosed fracture of the calcaneum”.<sup>1</sup> The author, having accepted the original diagnosis of partial Achilles tendon rupture was incorrect, suggested on expanding the criteria for radiological assessment in doubtful clinical cases. It was obvious from the history that the injury was sustained as a result of minimal trauma, in a patient with significant risk factors for osteoporosis. Coupled with an examination finding of a palpable gap in the Achilles tendon/calcaneal complex, the incorrect diagnosis was made solely on a negative Simmonds test. With these clinical findings and the published lateral radiograph of the calcaneum, I do not accept the original opinion of a negative Simmonds test. Simmonds<sup>2</sup> or similarly Thompson’s test,<sup>3</sup> has been shown to be a reliable sign for complete Achilles disruption,<sup>4</sup> with a diagnosis of partial rupture being a rare occurrence!

The lesson to be learnt from this case is not how to increase our diagnostic accuracy with radiology, but the importance of taking a good history and performing a sound clinical examination. The last thing we need is to generate protocols and criteria to make up for our shortcomings. Please note the correct spelling for Simmonds!

**D P S Baghla, N Somashekar**

St Mary’s Hospital, Praed Street, Paddington, London W2 1NY, UK

Correspondence to: Mr D P S Baghla; paul@baghla.freemove.co.uk

## References

- 1 **Cutts S, Morris MS.** A misdiagnosed fracture of the calcaneum. *Emerg Med J* 2001;**18**: 145–6.
- 2 **Simmonds FA.** The diagnosis of the ruptured Achilles tendon. *Practitioner* 1957;**179**:56–8.
- 3 **Thompson TC.** A test for rupture of the tendo Achillis. *Acta Orthop Scand* 1962;**32**:461–5.
- 4 **Maffulli N.** Rupture of the Achilles tendon. *J Bone Joint Surg Am* 1999;**81**(A):1019–36.

## Screening for alcohol misuse

The Paddington Alcohol Test (PAT) confers considerable advantage over the CAGE as the accident and emergency (A&E) screen for alcohol misuse.

Hadida *et al*’s commendable study<sup>1</sup> identified 28% (out of 413) A&E attendees as having an alcohol related problem. A pilot study using the CAGE, run in our department a decade ago,<sup>2</sup> had a very low pick up rate, which was one of the reasons behind the development of the PAT. Our recent study,<sup>3</sup> using the PAT, had an overall detection rate of 6.4% rising to 9.8% in the third month after intensive audit and feedback.

Four features could explain the discrepancy:

(1) in the PAT study only 61.1% of patients had presenting complaints mandating the test. The detection rate for this group (in month 3) was 14.3%.

(2) in this group, 62 patients (of 286) were missed—that is, did not have the test applied.

(3) the Hadida *et al* study identified a number of misusers by “staff assessment”. The basis of this assessment is unclear. Two questions are paramount: (a) Was an alcohol history taken?, (b) Did the patient agree with the doctor/nurse’s assessment?

(4) the Hadida *et al* study effectively had an extra member of staff run the screening protocol—whereas PAT usage simply reflects our own routine practice, with no extra staffing.

Studies suggest the CAGE detects dependent rather than hazardous drinkers,<sup>4</sup> a point rightly discussed by Hadida *et al*, and emphasised elsewhere.<sup>5</sup> Compared with dependent drinkers, hazardous drinkers (earlier on in their drinking history) are more likely to respond to brief interventions.<sup>5</sup>

The PAT is designed specifically for use by A&E practitioners, to detect hazardous as well as dependent drinkers. Detection is not indiscriminate but guided by “The Top Ten” presenting conditions, whereby screening is targeted and most effective. Furthermore, question 3 of the PAT—“do you feel your current attendance in A&E is related to alcohol?”—helps reinforce the idea that their presenting problem may be alcohol related, even if the patient were to refuse help on this occasion.

As the number of A&E departments that work with alcohol health workers increases it is hoped that the worth of the PAT will be further recognised.

**J Huntley, C Blain, R Touquet**

Accident and Emergency Department, St Mary’s Hospital, Praed Street, London W2 1NY, UK

Correspondence to: Mr R Touquet

## References

- 1 **Hadida A, Kapur N, Mackway-Jones K et al.** Comparing two different methods of identifying alcohol related problems in the emergency department: a real chance to intervene? *Emerg Med J* 2001;**18**:112–15.
- 2 **Green M, Setchell J, Hames P, et al.** Management of alcohol abusing patients in accident and emergency departments. *J R Soc Med* 1993;**86**:393–5.
- 3 **Huntley JS, Blain C, Hood S, et al.** Improving detection of alcohol misuse in patients presenting to an accident and emergency department. *Emerg Med J* 2001;**18**:99–104.
- 4 **Cherpitel CJ.** Screening for alcohol problems in the emergency room: a rapid alcohol problems screen. *Drug Alcohol Depend* 1995;**40**:133–7.
- 5 **Working party of the Royal College of Physicians.** Alcohol—can the NHS afford it? Recommendations for a coherent alcohol strategy for hospitals. London: Royal College of Physicians, February 2001.

## Authors’ reply

We thank Huntley and colleagues for their comments on our paper.<sup>1</sup> They make the point that the Paddington Alcohol Test<sup>2</sup> is a better instrument for screening for alcohol problems in the emergency department than the CAGE.<sup>3</sup> We would not take issue with this.

The main aim of our study was not to investigate the sensitivity and specificity of

different screening tests, but rather to show the feasibility of screening high proportions of patients as a first step towards intervention. We successfully screened 413 of 429 patients (96%), a much higher proportion than other studies.<sup>4,5</sup> As Huntley *et al* point out, this may reflect the fact that we effectively had an extra member of staff to run the screening. In addition we chose to recruit a representative flow sample of patients rather than consecutive attenders.

A further aim of our study was to ascertain whether different screening instruments identified different groups of patients. Our results suggested that they did, and we suspect that this would have been the case regardless of the precise screening instrument used in the study. The main point is that patients presenting to the emergency department with alcohol problems are a complex and heterogeneous group. Blanket approaches to treatment are unlikely to work and we need to target specific interventions to those patients who might most benefit.

As regards assessment tools, a brief alcohol history was taken by the researcher interviewing the patients. The staff assessment consisted simply of the interviewer asking the member of emergency department staff who had seen the patient whether they thought the attendance was alcohol related. The patient agreed with the staff assessment in just over one third of cases (29 of 76). There was a higher level of agreement between the patient and the CAGE assessment, with agreement in two thirds of cases (49 of 75).

We would strongly support the use of tools such as the PAT and the CAGE to screen for alcohol problems in the emergency department. However, for this to be a useful process all emergency department attenders need to be screened. Screening programmes that miss significant numbers of patients are unlikely to be worthwhile.

#### N Kapur

University Department of Psychiatry, School of Psychiatry and Behavioural Sciences, Manchester Royal Infirmary, Manchester, UK

#### K Mackway-Jones

Department of Emergency Medicine, Manchester Royal Infirmary

Correspondence to: Dr N Kapur, University Department of Psychiatry, School of Psychiatry and Behavioural Sciences, Manchester Royal Infirmary, Oxford Road, Manchester M13 9WL, UK

#### References

- 1 **Hadida A**, Kapur N, Mackway Jones K, *et al*. Comparing two different methods of identifying alcohol related problems in the emergency department: a real chance to intervene? *Emerg Med J* 2001;**18**:112–15.
- 2 **Smith SGT**, Touquet R, Wright S, *et al*. Detection of alcohol misusing patients in accident and emergency departments: the Paddington alcohol test (PAT). *J Accid Emerg Med* 1996;**13**:308–12.
- 3 **Ewing JA**. Detecting alcoholism: the CAGE questionnaire. *JAMA* 1984;**252**:1905–7.
- 4 **Peters J**, Brooker C, McCabe C, *et al*. Problems encountered with opportunistic screening for alcohol related problems in patients attending an accident and emergency department. *Addiction* 1998;**93**:589–94.
- 5 **Huntley JS**, Blain C, Hood S, *et al*. Improving detection of alcohol misuse in patients presenting to an accident and emergency department. *Emerg Med J* 2001;**18**:99–10.

## BOOK REVIEWS

### Advanced paediatric life support, 3rd edn

Advanced Life Support Group. (£25). BMJ Books, 2001. ISBN 0-7279-1554-1

The Advanced Paediatric Life Support manual was born in the early 1990s. As with all new births, it was difficult to tell how it would develop. However, its parents hoped that it would develop into a practical widely used entity. As a candidate on the first Manchester APLS course in 1992, the manual existed as a series of handouts from various paediatric specialists. Many met the aims of being practical, while others were too inclusive.

The Manchester APLS manual first spoke to the world in 1993. Its highly practical approach proved to be extremely popular. Therefore, building on the feedback from the Advanced Paediatric Life Support Courses the manual began to walk with the publication of its second edition in 1997.

The manual is now ready to start school and interact with other organisations. The 3rd edition has affiliations with the European Resuscitation Council, the Resuscitation Council of South Africa and Australian Advanced Paediatric Life Support Course. This latest edition has undergone some refinement. The initial two parts of the manual have had only minimal revision bringing them into line with current resuscitation practice and add further practical advice such as the use of semi-automatic defibrillators in children. The main revision has been in the seriously ill child section. Chapter headings have been changed to reflect the presenting problem of children. Layout and presentation of this section has changed dramatically.

The final sections on trauma and practical procedures have had only minimal alterations. It is noteworthy that with the affiliation to Australia, an additional appendix has been added dealing with envenomation.

In general terms this continues to be an excellent practical manual for resuscitation of children in the first hour. I have frequently been faced with junior doctors in the resuscitation room of our Children's Hospital with the APLS manual open correcting my actions!

There are some disappointments with the new text. As with a child starting school, there is an inordinate amount of spelling and grammatical errors contained within the new sections. While these seldom directly affect the understanding of the manual, they are extremely irritating. I have mixed feelings about the revision to the serious illness section. While there is much more information contained within the chapters compared with the 2nd edition, the revisions have made the chapters less easy to read and more like a standard textbook. There is also an excessive amount of repetition in each of the chapters.

However, these are minor quibbles in a text which has become the gold standard for paediatric resuscitation in the UK.

The strength of the APLS manual has been that it is available to buy without actually undertaking the course. It is also continually updated by feedback from individuals undertaking these courses. The manual will continue to grow and reflect changing patterns of care in paediatric emergencies. Long may it continue.

J Ferguson

### Save lives, save limbs

H Husum, M Gilbert, T Wisborg. (Pp 226). Third World Network, 2000. ISBN 983-9747-42-8

"Save lives save limbs" by Hans Husum and his colleagues is a book that is attractive, full of information, and, although at times it reads like a heart tugging novel, it retains a high educational value. In a concise and well illustrated manner the book describes the total care of the victims of anti-personnel weapons. It should appeal to everyone interested in trauma and is, in my opinion, obligatory for all those who find themselves working outside the luxurious resources of Western hospitals. The authors have substantial experience of working in adversity and they try to offer a solution to the inadequate resources usually found where most of these injuries occur.

It begins with a well illustrated description of the types of mines and the injuries they cause. The description left me wondering what sort of person actually sits down and designs these ghastly devices. Perhaps even more amazing is the thought that many highly respected members of Western communities live well on the profits from this lethal trash.

ATLS techniques are described in detail and there is an excellent theme of damage control in trauma care. Technical details are supported by the simple philosophy that everyone can learn the basic techniques of life and limb preservation and once learnt it is our duty to pass on the knowledge. The simple statements and clear illustrations, often in cartoon form, prove that the authors themselves fully follow this ideal and urge the concept of the "Village University".

There is an academic quality to this book as well as practical advice on immediate care, surgical techniques, anaesthesia, and nutrition. The physiological importance of fear is emphasised with an example of how to calm a patient while organising their removal from a minefield—a vital but common form of prehospital care in the real world. Every subject is illustrated by, inspiring, examples of ordinary people—some qualified in medicine or nursing and others not—who have saved life and limbs by using their skills.

Trauma specialists are no use if they are three days travel away from the casualty. The possession of higher surgical qualifications at a distance count for nothing compared with limited but immediately. An impressive proof of this fact is the use of limited laparotomy when isolated from a major hospital. The book describes how to stop bleeding and leave the complex visceral repair to the "experts" after transfer. There is an excellent example of an Afghanistan nurse successfully undertaking imperative "damage control" laparotomy for intra-abdominal bleeding; movement of the casualty to a hospital was not immediately possible because of the likelihood of aerial fighter attack during daylight hours! Quite possibly this type of treatment would lead to a reduction in the incidence of the increasingly recognised "abdominal compartment syndrome".

Very few engaged in trauma care would fail to gain some new knowledge or insight from this excellent, "one sitting read". Despite its simple format the book is an excellent text for UK trainees and demonstrates universally applicable methods while using common sense to underline theory.

The book confirms that "knowledge is power" but especially when it is shared. It is

obviously aimed at developing countries but I would recommend that this book find a place in all NHS hospital libraries. Perhaps when junior doctors in the United Kingdom are feeling overworked and consultants believe that they are underpaid a review of this remarkable work would lead them to ponder on their good fortune.

J P Beavis

### Key topics in accident and emergency medicine, 2nd edn

R Evans, D Burke. (Pp 344; £24.99). Bios Scientific, 2001. ISBN 1-85996-124-X

This is the second edition of a book that will be already familiar to most trainees and consultants in emergency medicine. Speaking from personal experience this excellent text remains an essential read for anyone planning to sit the FRCS(A&E) Edin examination and be successful! As a trainee preparing for the FFAEM examination it will undoubtedly prove equally as valuable once again.

The book provides concise, well structured articles on essential clinical topics relevant to the practice of emergency medicine in the UK. It is not intended as a comprehensive textbook but refreshingly focuses on specific clinical areas of common subjects.

The book takes the reader alphabetically through a progression of 94 topics covering everything from "adder bites" to "wrist injuries" with each topic covering no more than five to six pages. Each section covers the essential facts, clearly presented with a strong emphasis on the clinical aspects relevant to emergency medicine practice. The format is easily readable with each section subdivided to include the salient features of epidemiology, clinical symptoms and signs, investigations, treatment and procedures as well as the medicolegal aspects. Pertinent references and indexed related topics are given at the end of each chapter including web site addresses where appropriate.

The new edition has been updated to reflect the changing practice of emergency medicine in the UK including greater coverage of paediatric issues. New sections have been written on current issues such as ecstasy and  $\gamma$ -hydroxybutyrate use and on controversial clinical techniques such as rapid sequence intubation. The new text reflects the development of the specialty including chapters referring to the BAEM guidelines on the management of radiation casualties and chemical incidents. There is even a chapter listing the FFAEM core curriculum to act as a sobering reminder to any trainee preparing to sit the exit examination.

Much of the content will be revision for experienced clinicians but the design and layout allows the text to be used for rapid access to important facts. The book fits easily into a locker or cupboard in the emergency department and can be used as an immediate reference during busy clinical days. During my time as an SpR I have found this text to be particularly useful as a teaching aid for SHOs (especially for those occasional sessions that occur at short notice).

This latest edition to the successful Bios series provides an excellent reference and revision text for busy clinicians, especially anyone preparing for postgraduate examinations.

J M Butler

### Resuscitation in primary care

M Colquhoun, P Jevon. (£15.99). Butterworth Heinemann, 2001. ISBN 0-7506-4249-1

I have a thing about "whinging" GPs (despite the fact that my three children believe that it is me). I get really irritated by the person who stands up at a clinical meeting and tells his hospital colleagues "that's all right for you in your Ivory Tower but out there in the real world". So when I saw this book I thought is this another attempt by primary care to demonstrate its need to be independent of our hospital colleagues? We have an excellent manual produced by The Resuscitation Council—why do we need this? Then I sat down, took my cynic's hat off, and looked at the situation once again. I got out my Advanced Life Support Course Manual and looked through it and thought to myself—I do not carry adenosine. Blood gas analysis in the patients bedroom is a tricky procedure, the cardiac arrest team is usually me and an ambulance crew if things go well and post-resuscitation care consists of getting the patient to hospital as quickly as possible—with ventilatory support if necessary.

There are significant sections of the Advanced Life Support Manual that are not relevant to GPs and therefore there probably is a need for a book about resuscitation in primary care. I could now spend the next two or three pages giving you reasons why The Resuscitation Council should think about an ALS Course—specifically for out of hospital practitioners. I will resist the temptation—it may however be worth thinking about.

"Resuscitation in primary care" not only goes over all the relevant material with regard to prehospital cardiac resuscitation but also covers resuscitation of infants, children, and the newly born—in my experience areas that give rise to a lot of worries in prehospital care practitioners. It does all this in 132 A5 size pages of reasonably large type therefore it is not a long read. It contains all the European Resuscitation Council Algorithms relevant to Pre-hospital Care Resuscitation and covers all the aspects of resuscitation in relevant detail and also covers anaphylaxis. Therefore this book could easily be used as a manual for a prehospital ALS course.

My only criticism would be the method of LMA insertion described in the book. This is not the method recommended by the manufacturers.

This book is worth keeping in mind for all those who teach cardiac resuscitation in prehospital care.

J Colville Laird

### Eye know how

S R Fraser, R Asaria, C Kon. (£17.95). BMJ Books, 2001. ISBN 0-7279-1413-8

Ophthalmology is a tricky area for many staff in accident and emergency (A&E). There are few true ophthalmic emergencies but many semi-urgent conditions that could benefit from early diagnosis and treatment. Unfortunately, ophthalmology is increasingly being squeezed from the undergraduate curriculum and many in A&E will be relatively unfamiliar with this important topic.

"Eye know how" is certainly a catchy title for a book aimed at the non-ophthalmologist dealing with ocular problems. It claims to concentrate on the common complaints seen in primary care and A&E. The structure of the book has something to commend it as the

authors have adopted a presentation led approach to ocular problems with decision trees to aid diagnoses. Unfortunately, these, as with the rest of the books content, appear to be based on the authors current practice and opinions rather than any published evidence. There are no references and I would argue that there is published evidence in direct contradiction to the authors opinions for common conditions such as corneal abrasions.

However, the greatest criticism of this book must be the lack of pictures and diagrams. Ophthalmology is, by any reckoning, a visual specialty and despite the authors premise that pictures are not required to learn the basics I cannot agree with this. The few black and white photographs in the book are generally of an extremely poor quality. While they point out that other texts with colour photos are more expensive, they are in my opinion worth it as so much of ophthalmological diagnosis is aided by pattern recognition.

Would I buy this book? Personally I would not. I would save up a little longer for a text with colour illustrations and slides.

S D Carley

### Handbook of pediatric emergencies, 3rd edn

Edited by G A Baldwin. (\$39.95). Lippincott Williams and Wilkins, 2001. ISBN 0-7817-2236-5

"We have really everything in common with America nowadays, except, of course, language."

Oscar Wilde, "The Canterville Ghost", 1887

A good handbook should provide ready access to relevant information in a readable format. One might expect residents to carry it around in their pockets, referring to it with decreasing frequency as their confidence grows. Many published handbooks reflect the practice in a given unit, designed to be used in that unit with all the protocols for that unit documented and expanded upon. As such they will probably travel badly.

There are many areas in which this book is commendable. The chapters have relevant headings and follow a logical pattern. Flow diagrams are well presented. Protocols are logical and relevant to most practices, as are the references at the end of the chapters and sections. These, however, have a significant bias to North American publications, ignoring publications from other geographical areas. Is their Medline different to ours?

Now, however, we come to Oscar Wilde (see above). This book is driven by North American practice, associated with North American phraseology, terminology and usage. Those of us who get most of our CME from watching "ER" and "Chicago Hope" will probably be familiar with much of the terminology (CBC, BUN, etc). While this is little more than an irritant it does detract from the relevance to United Kingdom practice.

I tried to gain some insights in to the management of some of the children attending my department by delving into the book, after I had seen the patients. In the main I agreed with the principles of care described, but there are areas where I would welcome debate with the authors. I was particularly disappointed not to be able to find anywhere in the book a description of how to perform a femoral nerve block. Surely this would be much more important to include than fig 15.2 showing how to remove a foreign body from an ear?

How does this book fare? The clinical data are good, but the style (and North American slant in particular) detracts from its appeal on this side of the pond. Other than that, Oscar Wilde says it all!

**T F Beattie**

### **Injury control: a guide to research and program evaluation**

Edited by F P Rivara, P Cummings, T D Koepsell, D C Grossman, R V Maier. (Pp 280; £60). Cambridge University Press, 2001. ISBN 0-521-66152-8

This book aims to catalogue the research designs available for all those involved in injury control and research. It is aimed particularly at those who wish to improve their understanding, review injury research or conduct research in the field, so essentially it is a reference text. It is a hard backed book, 280 pages long, written by a group of epidemiologists and trauma surgeons from Harbourview Medical Center in Seattle.

To a large extent this book is successful in its aim. It has 20 chapters and begins with a historical review of what injury research has achieved to date. The future challenges of improved management for traumatic brain injury, multi-organ failure prevention and the measurement of disability are laid before us.

The first half of the book lays the baseline and describes injury scoring systems, the use of secondary databases, how to select the correct study design and issues such as sampling. Some of these first 10 chapters are useful, others, such as that on rates and

epidemiological principles, lack worked examples that would have helped when explaining issues, such as the difference between direct and indirect standardisation and the different forms of regression analysis. This half of the book fails to acknowledge the contribution of physiologists and animal work. In general the book has a large epidemiological bias, reflecting the backgrounds of the contributors from either side of the Atlantic.

The second half of the book generally cuts to the chase and details the different types of studies available to those conducting research. There are useful contributions from either side of the Atlantic. Ian Stiell's section on developing decision rules is particularly inspiring.

Despite its omissions this book is a useful reference text for those undertaking research in injury and those wishing to broaden their knowledge and understanding with some focused reading. Hopefully, the next edition will contain more contributions from emergency physicians who have improved the evidence base for trauma care with quality research. Injury control needs a clinician's as well as an epidemiological perspective.

**F Lecky**



## NOTICE

### **999 EMS Research Forum Board**

The 999 EMS Research Forum Board is accepting abstracts for presentation at AMBEX 2002. Papers are invited on all areas of prehospital emergency healthcare. Papers for consideration should be submitted by 6 May 2002.

To obtain an official submission form email Anne Surman at a.g.surman@swan.ac.uk or write to Anne at the Clinical School, University of Wales Swansea, Singleton Park, Swansea SA2 8PP.

### **Submissions**

Authors of the most original and interesting scientifically based work in the prehospital arena will be invited to present their study in either an oral or poster presentation during sessions at AMBEX 2002.

All work must be original and must not have appeared in a national journal or have been presented at a national meeting prior to the submission deadline.

All abstracts accepted by peer review will be published in the *Emergency Medical Journal*.

### **Awards**

Cash awards will be given for:

- research most likely to impact on patient care
- most original research
- best poster

## CORRECTION

An editorial error occurred in this article by Tewary and Cawte (January 2002;19:81). The illustration was used by permission from Disney Enterprises, Inc. We apologise that this statement was omitted from the article.