LETTERS TO THE EDITOR

Acute myocardial infarction in patients with left bundle branch block

EDITOR,—We read with interest the paper about the electrocardiographic diagnosis of acute myocardial infarction (AMI) in patients with left bundle branch block (LBBB).[1] It emphasises the difficulties many have had with electrocardiogram (ECG) interpretation in this situation and explains clearly how to use the criteria of Sgarbossa *et al*.[2] It concludes that these criteria can be used to identify patients with LBBB and AMI.

It is essential that accident and emergency staff recognise this group of patients so that thrombolysis is delivered promptly. Shlipak *et al* reviewed patients presenting with LBBB and an acute cardiopulmonary history and assessed the usefulness of the Sgarbossa criteria.[3] They found that these criteria had a sensitivity of 10% and a specificity of 100%. Although an ECG that satisfies the criteria is almost certainly indicative of AMI, most (90%) patients with AMI will not meet the criteria. If thrombolytics were to be withheld unless the criteria were met, few patients in this high risk group would receive appropriate treatment.

Rather than relying on the Sgarbossa criteria, we feel it would be more appropriate to thrombolyse all patients (except those with contraindications) who have a history suggestive of AMI and LBBB. This policy is supported by the data of Shlipak *et al*.

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1 Brady WJ, Morris F. Electrocardiographic diagnosis of acute myocardial infarction in the presence of left bundle branch block. *J Accid Emerg Med* 1999;**16**:275–9.
2 Sgarbossa EB, Pinski SL, Barbagelata A, *et al.* Electrocardiographic diagnosis of evolving acute myocardial infarction in the presence of left bundle branch block. *N Engl J Med* 1996;**334**:481–7.
3 Shlipak MG, Lyons WL, Go AS, *et al*. Should the electrocardiogram be used to guide therapy for patients with left bundle branch block and suspected myocardial infarction? *JAMA* 1999; **281**:714–19.

The authors reply

We read with interest the comments of Shepherd and Hardern concerning our article. In large part, we agree with their thoughts. In our report, we stressed several points, including (1) the confounding effect of LBBB pattern on the electrocardiographic diagnosis of AMI; (2) the "normal" or expected findings of LBBB; and (3) additional electrocardiographic strategies to assist in identifying the patient with a potential AMI. Several electrocardiographic strategies are available to the clinician to assist in this endeavour such as comparison with old ECGs, examination of serial ECGs, and a sound understanding of the anticipated ST segment changes resulting from LBBB. These strategies may be supplemented by the clinical decision rule developed by Sgarbossa *et al*.[1]

Since our report was published, recent literature[2 3] has suggested that the Sgarbossa *et al* clinical prediction rule is less useful than reported. The first such investigation,[2] not noted by Shepherd and Hardern, which applied the Sgarbossa *et al* criteria to patients with chest pain and LBBB in the emergency department of a North American hospital, found much less promising results—a very low sensitivity coupled with poor interobserver reliability. And, as noted by Shepherd and Hardern, a second study[3] investigated the diagnostic and therapeutic impact of this criteria—none effectively distinguished the patients who had AMI from those patients with non-coronary diagnoses. The authors concluded that electrocardiographic criteria are poor predictors of AMI in LBBB situations and suggested that all patients suspected of AMI with LBBB should be considered for thrombolysis. As we stated, even if the Sgarbossa *et al* clinical prediction rule is found to be less useful in the objective evaluation of the ECG in the patient with LBBB, the report has merit—it has forced the clinician to review the ECG in detail and cast some degree of doubt on the widely taught belief that the ECG is invalidated in the search for AMI in the LBBB patient.

Traditional criteria for administration of thrombolytic agents in the AMI patient most often involves electrocardiographic ST segment elevation situated in an anatomic distribution; the presence of a new LBBB pattern represents another electrocardiographic criterion for such treatment. Shepherd and Hardern suggest that all appropriate patients with LBBB pattern—presumably regardless of its chronicity—and a history suggestive of AMI receive a thrombolytic agent. Such an approach is perhaps reasonable if the physician has a high suspicion of AMI and is comfortable initiating thrombolysis based solely on clinical information—in other words, an analysis of the patient's history and physical examination. Physicians, however, may be uncomfortable administering a thrombolytic agent under such circumstances; in fact, patients with electrocardiographic LBBB and AMI less often receive thrombolysis despite an increased risk of poor outcome[1 4] and the potential for significant benefit.[5] The clinician must realise that of all patients with chest pain, electrocardiographic LBBB pattern without obvious infarction, and clinically presumed AMI, only a minority will actually be experiencing acute myocardial infarction.[1] Treating all such patients with LBBB and presumed AMI will subject a number of non-infarction patients to the not insignificant risks and expense of thrombolysis. The chest pain patient with LBBB represents a significant challenge to the emergency practitioner. Currently, no single or combination diagnostic approach exists which will reliably reveal AMI in timely fashion. Our article was intended to review the appropriate principles of electrocardiography in the LBBB pattern in the hopes that the emergency practitioner would be better versed in interpretation of these complicated ECGs and therefore offer the AMI patient the correct treatment in rapid order.

1 Sgarbossa EB, Pinski SL, Barbagelata A, *et al.* Electrocardiographic diagnosis of evolving acute myocardial infarction in the presence of left bundle branch block. *N Engl J Med* 1996;**334**:481–7.
2 Shapiro NI, Fisher J, Zimmer GD, *et al.* Validation of electrocardiographic criteria for diagnosing acute myocardial infarction in the presence of left bundle branch block. *Acad Emerg Med* 1998;**5**:508(abstract).
3 Shlipak MG, Lyons WL, Go AS, *et al.* Should the electrocardiogram be used to guide therapy for patients with left bundle branch block and suspected acute myocardial infraction? *JAMA* 1999;**281**:714–19.
4 Rogers WJ, Bowlby LI, Chandra NC, *et al.* Treatment of myocardial infarction in the United States (1990 to 1993): observations from the National Registry of Myocardial Infarction. *Circulation* 1994;**90**:2103–14.
5 ISIS-2 (Second International Study of Infarct Survival) Collaborative Group. Randomized trial of intravenous streptokinase, oral aspirin, both, or neither among 17 187 cases of suspected acute myocardial infarction: ISIS-2. *Lancet* 1988;**ii**:349–60.

Confirmation of correct endotracheal tube placement

EDITOR,—We were disturbed to note from the survey of Florance *et al* that fewer than 50% of "major" accident and emergency departments in East Anglia report having any facilities for end tidal carbon dioxide ($ETCO_2$) monitoring available for trauma patients.[1]

All emergency departments in North America that manage trauma patients routinely keep in their trauma rooms at least a calorimetric device for $ETCO_2$ detection—not to do so would be considered indefensible in the event of an adverse airway event (R N Walls, personal communication).

Relying on having *seen* the endotracheal tube "pass through the cords" and depending on clinical signs is hazardous in the multiply injured patient. Capnography should be considered mandatory in any patient requiring intubation, especially as an emergency. The endotracheal tube must be replaced immediately in any patient not in cardiac arrest in whom $ETCO_2$ is not detected.[2]

Endotracheal intubation continues to remain the "gold standard" for airway management for patients in cardiac arrest. The standard clinical signs widely used to confirm endotracheal intubation are again potentially unreliable and capnography is unhelpful. The use of a lit tracheal stylet (for example Trachlight Stylet and Tracheal Lightwand, Rusch Inc, Duluth, GA, USA), inserted through the endotracheal tube after intubation, can very simply provide indirect and rapid confirmation of correct tracheal placement by transillumination of the soft tissues of the neck. This simple technique may help to reduce the tragedy of failure to recognise oesophageal intubation in critically ill patients.

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1 Florance R, Griffiths R, Cope A. Capnography and "major" accident and emergency departments in East Anglia. *J Accid Emerg Med* 1999;**16**:159.
2 Walls RN, Luten RC, Murphy MF, *et al*, eds. *Manual of emergency airway management. The airway course.* 3rd Ed. Wellesley, MA: Airway Management Education Center, 1999.

The authors reply

We would like to thank Black and Skinner for their interest in our survey. Since then, one more department has acquired a capnograph, with more contemplating purchase. We hope this trend will continue.

We agree that capnography is essential in patients who require endotracheal intubation

and is a minimal monitor for anaesthesia in the UK and the USA. We have no experience of the "lit tracheal stylet" and so cannot comment on its usefulness.

However we question whether capnography is unhelpful in cardiac arrest. The level of carbon dioxide has been correlated with survival in cardiac arrest and the ability to resuscitate.[1] After cardiac arrest in patients already intubated, for example during surgery, $ETCO_2$ levels are invaluable in guiding resuscitation (personal experience RG).

In summary, capnography provides useful information about the correct placement of an endotracheal tube ("A"), the adequacy of ventilation ("B"), and the perfusion of the lungs ("C").

1 Sanders AB, Kern KB, Otto CW, *et al*. End-tidal carbon dioxide monitoring during cardiopulmonary resuscitation. *JAMA* 1989;**262**:1347–51.

Anaesthetic training for specialist registrars in accident and emergency

EDITOR,—Accident and emergency (A&E) trainees are required to spend a minimum of three months on secondment to anaesthetics and the intensive care unit (ICU) if they have not already obtained adequate anaesthetic/ICU experience before entering the specialty. The depth and breadth of experience varies widely. Sometimes, the trainee is purely supernumerary and gains little experience other than placing laryngeal masks and endotracheal tubes. We have each been fortunate enough to spend six months as trainee senior house officer (SHO) anaesthetists as part of our rotations. We feel that this offers considerable benefit to our training as A&E specialists and recommend it to other A&E trainees.

Anaesthetics is unlike any other clinical specialty. It is impossible to start as the sole "on call" anaesthetic SHO on the first day. Hospitals vary, but most train their new SHOs over three months before allowing them onto the on call rota. In our six month secondments we participated in the on call rota and have benefited from the responsibility of acute decision making. We have become increasingly competent in preanaesthetic assessment, sedation, pain management (including regional anaesthesia), and the induction, maintenance, and recovery phases of a general anaesthetic. We have performed rapid sequence induction independently. Our improved confidence in the management of the airway has to be good for patient care, especially as we often provide initial airway control before the anaesthetist arrives in the A&E department.

A greater understanding of anaesthetic problems and equipment will be increasingly important for A&E consultants as anaesthetics and A&E have a common role in airway management and ventilatory and circulatory support in critically ill patients. We propose that every A&E trainee requiring an anaesthetic secondment undergo six months of anaesthetics/ICU experience with the same commitment and training as a career anaesthetics SHO.

To achieve this, A&E training programmes should routinely allow the trainee to be released to SHO posts in anaesthetics and intensive care for six months. This could be at another hospital, although salary issues would need to be addressed in advance. These include salary protection at the specialist registrar grade, and how much each trust and postgraduate deanery pay.

We accept that both the quality and quantity of dedicated anaesthetic SHOs must be maintained. However, six month slots could still be allocated on a competitive basis, and an anaesthetic specialist registrar or SHO could undertake a similar secondment in A&E on an exchange. A&E medicine has a lot to offer, particularly in those departments that perform regional anaesthesia, rapid sequence induction, advanced life support, and advanced trauma life support without initially involving the on call anaesthetist.

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Casemix Healthcare Resource Group update

EDITOR,—The accident and emergency (A&E) medicine clinical working group of the Casemix Office (part of the NHS Information Authority) has selected six pilot sites to take part in a study leading to refinement of the A&E medicine Healthcare Resource Group (HRG). The chosen sites are as follows (attendances in previous year in thousands):

- Leeds General Infirmary (96)
- Derbyshire Royal Infirmary (78)
- Sandwell District General Hospital (72)
- Princess Alexandra Hospital, Harlow (60)
- Stoke Mandeville Hospital (39)
- Harrogate District Hospital (35)

Other departments are thanked for submitting high quality bids but it was essential to represent a broad cross section of emergency departments.

The current HRG A&E casemix measure version 1.0 uses disposal data that are already collected and are generally comprehensible. The A&E HRGs also have a specificity or reduction in variance for allocating appropriate grouping around costings and complexity of activity, which is currently better than that of any other specialty.[1]

Korner returns to the NHS of departmental activity using the A&E HRG are expected from hospital information departments June 1999 where possible, but are compulsory from June 2000.

The refinement projects will look at the potential of the national triage scale (NTS) and details of how long a patient stays in the department, to see if they provide a further reduction in variance and can be easily collected to drive our HRG.[2]

Work to date on this refinement project anticipates making recommendations to seek changes in the minimum dataset to include the NTS triage groupings, a separate investigation code for more expensive radiological investigations, such as intravenous urography, and a treatment code to identify patients receiving thrombolytic treatment.

The change from "finished consultant episodes" to so-called "spells" could lose our departments funding for the care of patients awaiting admission in A&E departments and not formally under our care. The pilot sites are therefore being asked to develop ways of identifying patients who are cared for within the A&E department but do not form part of the medical responsibility of A&E staff so that the burden that these patients place on our departments can be better evaluated. All general practitioner admissions activity should be triaged and flagged as A&E activity so that data analysis around this group can be undertaken.

The activity undertaken as outpatient work by consultants at scheduled review clinics is specifically excluded from this project, but will be covered in turn by the Outpatient HRG Development Project.

Observation ward activity (or spells) can be counted using the relevant existing inpatient HRGs.[3]

The whole project is due to report initial findings within the financial year. The current baseline project plan identifies a completion date of June 2000. We do not underestimate the hard work that will be necessary by the selected sites and the Casemix Office to deliver this refinement of our casemix measure. We owe them a debt of gratitude, especially when several of the sites will also be modernising their departments at the same time.

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1 Brayley N, Marrow J. Healthcare resource groups in accident and emergency medicine. *J Accid Emerg Med* 1996;**13**:143–4.
2 Marrow J. Triage and casemix in accident and emergency medicine. *European Journal of Emergency Medicine* 1998;**5**:153–8.
3 Brayley N, Bray P, Anthony P, *et al*. Towards a UK national casemix measure: how can we price activity in an observation ward? *Proceedings of the 6th International Conference on Emergency Medicine*. Sydney 1996: abstract O282.

Prospective survey to verify the Ottawa ankle rules

EDITOR,—In their study to verify the Ottawa ankle rules Perry *et al* point out "the potential dangers of rigidly adhering to decision rules".[1] The study discovered that four malleolar fractures would have been missed had the guidelines (per the Ottawa ankle rules[2]) been applied—that is, these patients would not have had radiography.

The data from the study were derived from the emergency department ankle "stamper", which comprises 12 parameters. Of these they selected four: age, posterior malleolar tenderness (which malleolus was not specified), inability to weight bear immediately, and inability to weight bear in the emergency department. This information was deemed adequate to meet the study's requirements.

However, age is relevant only as an eligibility criterion for application of the rules—it does not impact on decision making regarding radiography thereafter. Secondly, the failure to specify which malleolus was tender detracts from attempts at verification—the rules specify both malleoli must be assessed. Moreover, the study (and the stamper!) ignores the second part of the ankle rules entirely—that is, navicular zone and fifth metatarsal zone tenderness.

In view of the authors' decision to apply only part of the Ottawa ankle rules, and the disregard for one of the malleoli, it seems inappropriate to conclude that "although useful, decision rules should be used with *care* and cannot replace clinical judgment and experience".

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1 Perry S, Raby N, Grant PT. Prospective survey to verify the Ottawa ankle rules. *J Accid Emerg Med* 1999;**16**:258–60.
2 Stiell IG, Greenberg GH, McKnight RD, *et al.* A study to develop rules for the use of radiography in acute ankle injuries. *Ann Emerg Med* 1992;**21**: 384–90.

Dr Perry replies

Thank you very much for giving me the opportunity to reply to Dr McCann's letter. I disagree with Dr McCann's comments about age. The Ottawa ankle rules clearly state that plain radiography is indicated if the patient is aged 55 years or greater.[1]

The authors accept that our stamper did not specify which malleolus had been examined and may, theoretically, have resulted in some patients being recorded as "Ottawa negative" inappropriately. However, it is clearly stated in the discussion that the four missed fracture patients had their case notes reviewed and there were no apparent reasons why these fractures were not identified. This included ensuring adequate documentation of the clinical examinations.

It was never the intention to study the second rule concerning foot radiography and patients with bony tenderness of the foot were, therefore, excluded.

1 Stiell IG, Greenberg GH, McKnight RD, *et al.* Decision rules for the use of radiography in acute ankle injuries. Refinement and prospective validation. *JAMA* 1993;**269**:1127–32.

Fast tracking patients with a proximal femoral fracture—more than a broken bone

EDITOR,—In 1996 we described a system of fast tracking admission of patients with a proximal femoral fracture to the ward where definitive management could begin.[1] This system had benefits for all those involved, not least the patients who are mostly elderly women at risk of developing pressure sores.

Since we published the paper a number of changes have occurred at our hospital which reflect changes occurring in many hospitals in the NHS: the number of acute orthopaedic beds on the hospital site fell from 75 to 60; the number of acute admissions, particularly medical, has continued to rise; and improved resources and initiatives for managing emergency admissions have suffered at the expense of initiatives for reducing waiting lists.

In January 1999 we reviewed the length of stay in the accident and emergency (A&E) department for 25 consecutive patients over 65 years of age who were admitted with a proximal femoral fracture and compared them with figures for patients who were fast tracked in our original paper (fig 1). Although the 1995 figures were for patients who were fast tracked, the mean time for patients who could not be admitted because of the unavailability of an orthopaedic bed had still been only 4 hours and 8 minutes. The average length of stay has risen sharply with 40% of patients now staying in the A&E department for more than seven hours.

This apparent breakdown of a quality improvement initiative is an example of how emergency patients are suffering because of reduced numbers of acute hospital beds and a reduction in resources available for acute cases. In 1998 there were 812 cases of proximal femoral fracture over the age of 65 years admitted to our hospital. We advocate the availability of three dedicated beds each day for the management of patients with a proximal femoral fracture. The predictability of numbers and almost uniformity of presentation makes a fast track system for this type of injury eminently suitable. It is important, however, that hospital management work alongside clinicians in providing the necessary resources to develop a fast track service for this vulnerable group of patients.

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1 Ryan J, Ghani M, Staniforth P, *et al.* "Fast tracking" patients with a proximal femoral fracture. *J Accid Emerg Med* 1996;**13**:108–10.

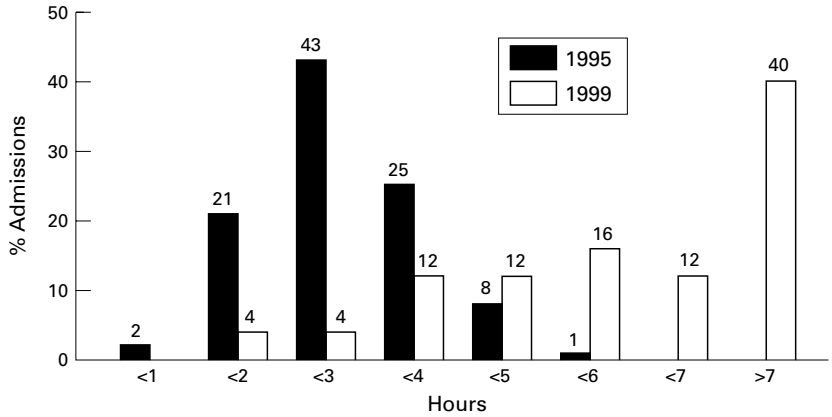

Figure 1 Length of stay in the A&E department for patients admitted with a proximal femoral fracture.

CS incapacitant spray

EDITOR,—In 1996, CS incapacitant spray was sanctioned for the use of police forces in England and Wales. As its use increases the demands on accident and emergency departments from individuals who have been exposed to this will also increase. Some of the points in Worthington and Nee's review[1] are worth clarifying.

The experimental work into the safety of CS was performed on pyrotechnically generated CS.[2 3] The spray used by the police produces a mist that contains CS as a supersaturated solution or as a fine powder. The solution in the spray is a 5% w/v solution dissolved in methyl isobutyl ketone (MIBK). The American forces use a 1% solution.

Pulmonary oedema after CS exposure has been reported,[2] but only in conditions where the victim has been unable to escape, and is trapped in a confined area—that is, on exposure to very high concentrations. Equally burns to skin occur in specific conditions: high temperature, humidity, high concentrations, and prolonged exposure.

As mentioned at the outset these experiments were conducted on CS produced by a different method and it is difficult to extrapolate the results to a totally different type of exposure. The solvent, MIBK, has a low volatility, therefore in areas protected from air currents (behind ears, in skinfolds, under clothing bands, etc) it may not evaporate, prolonging the contact in warm moist areas. MIBK, itself, also has the potential to cause inflammation, dermatitis, and burns to the skin.

Although the standard advice regarding management of CS exposure is to remove the subject from the source and allow a flow of fresh air over the affected parts, if symptoms are persistant irrigation and bathing are required, as skin irritation may not be caused by CS but by MIBK.

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1 Worthington L, Nee PA. CS exposure—clinical effects and management. *J Accid Emerg Med* 1999;**16**:168–70.
2 Himsworth H, Black DAK, Crawford T, *et al. Report of the enquiry into the medical and toxicological aspects of CS (ortho-chlorobenzylidene malonitrile). II: Enquiry into the toxicological aspects of CS and its use for civil purposes*. London: HMSO, 1971.
3 Punte CL, Owens EJ, Gutentag PJ, *et al.* Exposures to ortho-chlorobenzylidene malonitrile. *Arch Environ Health* 1963;**6**:366–74.

The authors reply

We thank Mr Southward for his comments on our paper. Comprehensive data on CS incapacitant spray are lacking, particularly with regard to the more concentrated solution in use by UK police forces.

Mr Southward reminds us that serious effects are more likely with excessive or prolonged exposure and are generally mitigated by the victim being removed to a well ventilated area. We recommended irrigation of the eyes for severe symptoms as well as suggesting some general measures for decontamination and the treatment of cardiorespiratory complications.

Mr Southward recommends that particular attention be given to areas of the body where air flow may not occur and we are grateful to him for providing this additional advice.

A rare cause of acute confusional state

EDITOR,—A 42 year old man presented after attempts to eradicate a wasps' nest in his attic with Rentokil wasp killer spray containing carbaryl 5%. The area was enclosed without windows. He was aware of the potential for toxicity and wore a cotton homemade mask. He sustained two wasp stings as he sprayed and his wife reported him staggering into the living room about 20 minutes later. Shortly after this he lost consciousness.

On arrival he was acutely confused and combative. Both conjunctiva were injected. He was haemodynamically stable with oxygen saturations >95%. He was difficult to manage because of his aggression and agitation. Short term memory was severely impaired. Oxygen and 5 mg intravenous diazemuls were given immediately. There was no history of allergies and no local reaction to the two wasp stings. We gave atropine 600 µg and used intravenous diazemuls to control the agitation. The patient was monitored and gradually improved.

Carbaryl can produce a host of signs and symptoms:

Mild—nausea and vomiting, diarrhoea, and tachycardias.

Moderate—confusion, sweating, salivating, incontinence, tremor, twitching, constricted pupils.

Severe—convulsions, coma, respiratory depression, cardiopulmonary arrest.

The acute confusional state, transient loss of consciousness, hypotension (recorded by paramedics on arrival), sinus tachycardia, and lacrimation seen in this man after spraying wasp killer in an enclosed, poorly ventilated area are typical of cholinergic hyperstimulation. This problem is more commonly reported with the use of agricultural pesticides containing organophosphates. Written on the bottle of the spray used is a warning not to use in enclosed, confined spaces.

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CD-ROM REVIEWS

Abdominal Ultrasound: Principles and Techniques. CD-ROM written by Mark Deutchman, Associate Professor of Family Medicine, University of Colorado, Denver. Published by SilverPlatter Education Inc, Newton, Massachusetts, 1997. ISBN 1-57276-031-1. Hardware requirements: Multimedia PC with Microsoft Windows (8 MB RAM) or Windows 95 (16 MB RAM) or Macintosh (System 7.0 or later with 8 MB RAM). Details available from: SilverPlatter Education Inc. 246 Walnut Street, Suite 302, Newton, MA 02460-1639, USA (tel: +1 800 521 0574/+1 617 244 0284).

The trend towards emergency abdominal ultrasound is filtering across the Atlantic. Observational studies have been made to study the impact and effectiveness of such imaging in the emergency department. This CD-ROM therefore seems appropriate for the accelerated learning of essential abdominal ultrasound principles and techniques.

Installation of the software is simple. Within minutes the novice is introduced to the basic physics and practicalities of sonographic imaging. Each organ of the abdominal cavity is anatomically orientated via a 3D animated model or coronal computed tomographic videographic image, relevant acoustic windows and shadows are highlighted, and normal ultrasonic images are emphasised. Representative images of common abnormalities, such as organomegaly, cysts, tumours, ascites and calculi, are presented via real time video images and multiple still images. Practical skills such as frame selection and organ measurement are emphasised and assessed. Cross reference icons allow for rapid updates on unfamiliar terms and principles, both within the text or via the world wide web.

This CD-ROM costs US$175 for individual use and US$495 for institutional use (plus shipping costs outside the US). While the educational content and the graphical quality are impressive, this CD-ROM needs more emergency case studies, particularly traumatic cases, for it to be of clinical and financial value in an accident and emergency department.

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Oxford Clinical Mentor CD-ROM or floppy disks. Single user version, network versions available. Oxford University Press. (Available from Healthworks Ltd, 30–38 Dock Street, Leeds LS10 1JF; tel: 0113 234 6624, fax: 0113 242 7782, e-mail: sales@d-access.demon.co.uk; the Oxford Clinical Mentor Plus is the new updated and expanded edition of the Oxford Clinical Mentor and costs £150 plus VAT.)

Increasingly well known medical texts are being republished as software for use on computers. These may have advantages over print and paper for the computer literate user particularly for the facility to search text rapidly.

The *Oxford Clinical Mentor* is described as an "electronic medical knowledge support system". More precisely it consists of the texts of the *Oxford Handbook of Clinical Medicine* and the *Oxford Handbook of Clinical Specialties* presented for use on a personal computer. Additionally the *Oxford Handbook of Clinical Rarities* is included, which is not available as a book. An IBM compatible computer with a minimum specification of a 486 DX-66 with 8 MB RAM and 30 MB hard disc space is required. The software runs under Windows 3.1 (or higher) or Windows 95. The publishers state that it is designed "for use in GPs' surgeries, hospital casualty departments and by medical students everywhere".

The main search window allows rapid access to the information required but takes a little time to master. The text provided is of high quality and will be familiar to many who have used the books. The emphasis is on general medicine and though most other areas of medicine are covered, it could not be accepted as a comprehensive text for doctors working in accident and emergency (A&E) departments. There is extensive cross referencing that is accessed by electronic jumps and references for further reading. There is a temptation to browse through the different sections of the programme, which might prove a distraction for junior colleagues.

Although the *Oxford Clinical Mentor* is an innovative way of providing access to medical information its clinical content is more suitable for use in general practice than A&E. A similar system more orientated to the clinical problems of A&E medicine would be a welcome addition to a department's resources. While the *Oxford Clinical Handbooks* are a valued part of most departmental libraries, I would not recommend the purchase of this electronic version for use on A&E computer systems.

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Books received

Peer Review in Health Services. Edited by Fiona Godlee and Tom Jefferson. (Pp 271; £30.) BMJ Publishing Group, 1999. ISBN 0-7279-1181-3.

Infectious Disease in Emergency Medicine. 2nd Ed. Edited by Judith C Brillman and Ronald W Quenzer. (Pp 951; £132.) Lippincott-Raven, 1998. ISBN 0-316-10950-9.

NOTICES

Modern Management of Acute Medical Emergencies

21–22 February 2000, Royal College of Physicians, London. *Further details*: CCI Limited, 2 Palmerston Court, Palmerston Way, London SW8 4AJ (tel: 0207 720 0600, fax: 0207 720 7177, e-mail: AME2000@confcomm.co.uk).

Critical Care, Trauma, and Emergency Medicine, 38th Annual Symposium

28 February–3 March 2000, Las Vegas, Nevada, USA. *Further details*: Associate Dean, USC Postgraduate Medicine, 1975 Zonal Ave, KAM 307, Los Angeles, CA 90033, USA (tel: +1 323 442 2555, fax: +1 323 442 2152, +1 323 221 9617, e-mail course coordinator: bowker@hsc.usc.edu).

Children and Bereavement, Who Cares? A Challenge to the Community

21 March 2000, Queen Elizabeth II Conference Centre, London. *Further details:* Margaret Fitz-Hugh, Education Department, Marie Curie Centre, Caterham (tel: 01883 347 761).

British Association for Accident and Emergency Medicine 2000

4–7 April 2000, Churchill College, Cambridge. *Further details*: Conference Contact, 42 Devonshire Road, Cambridge CB1 2BL (tel: 01223 323437, fax: 01223 460396, e-mail: cc@confcon.demon.co.uk).