LETTERS TO THE EDITOR

Advanced life support courses

EDITOR – We write in response to the paper by Hall et al1 in which two lecture-based one day introductory courses on cardiac and trauma life support are described. One striking common feature in all the life support courses available in this country, whether developed by the American College of Surgeons, the UK Resuscitation Council, or the Advanced Life Support Group in Manchester, is the reduction in time spent gaining knowledge passively in lectures. Active learning of practical skills and the integration of all knowledge gained – with a real need to show that both the concept of advanced life support and the ability to lead a team has been acquired in simulated clinical scenarios – have been found to be much more useful than a series of lectures.

Since 1992, we have held a Resuscitation Training Day two weeks before each team of SHOs start work in the accident and emergency (A&E) department (programme shown below). To date almost 100 doctors have attended and to date only one has missed the course, as he was working in Africa. The one day course can be run on four staff and we are fortunate to have medical student volunteers as the trauma moulage patients. There are virtually no expenses. The course covers adult advanced cardiac and trauma resuscitation in outline, but the emphasis is on skills training and active participation rather than lectures. The programme has been virtually unchanged over the past four years and the SHOs consistently score the day 10 out of 10 for both content and presentation. It allays their greatest fear on starting work in the A&E department, that of being involved in a major resuscitation; it is also a wonderful opportunity to meet the new team in a relaxed informal manner while the shop floor is managed by the experienced outgoing team.

We run this training day in addition to the national ALS, APLS, and ATLS courses, as clearly there is a need to meet the demand from prospective candidates for these excellent courses.

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Benefits of immediate printing of blood test results within an A&E department

EDITOR – Acquiring, accurately recording, and securing blood results in the patients’ notes are not inconsequential problems. Much time may be spent telephoning the laboratory (interrupting their work) or inquiring from the pathology computer system, only to find the results not yet available. Recording results from the computer screen or a telephone is prone to errors, both in numerical accuracy and patient identity. Having recorded the results on paper, they may then not be entered into the patients’ notes. Add to this the large and increasing number of patients who have blood tests within an accident and emergency (A&E) department and the need for an improved system is clear.

Printing the pathology reports in the A&E department as they become available overcomes many of these problems. At the Bristol Royal Infirmary a DEC LA 75 printer has been installed in the A&E department, linked to the pathology computer by an Ethernet network link. When the chemical pathology or haematology results are available they are put into a queue in patient order. Every five minutes this queue is printed, the reports being on 10 x 15 cm sticky labels which can then be secured directly and easily into the patient’s notes (fig 1). This overcomes the problems listed above, saving considerable time (each computer enquiry takes at least 60 seconds), eliminates transcription errors, and ensures the results get into the notes, the patient’s identity number and name being on each report.

At the Bristol Royal Infirmary approximately 15 000 blood tests per year (40 per day) are performed on patients within the A&E department. Since the introduction of this system there has been a significant reduction (P < 0.001) in the number of inquiries to the chemical pathology and haematology systems from the A&E department and a definite subjective impression by the laboratory staff of a reduction in telephone inquiries, which are now usually made when there has been an unusual delay in transport or an instrument malfunction. Figure 2 shows that at 60 minutes after receipt of the sample 78% of biochemical results and 85% of haematology results have been printed. Connection of the A&E department to the pathology department, six floors above, by a pneumatic tube ensures rapid delivery of the samples 24 hours a day, such that over 95% of results are printed within 120 minutes of the phlebotomy. We would recommend this system as a simple and inexpensive way of

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Course programme

<table>
<thead>
<tr>
<th>RESUSCITATION TRAINING DAY FOR NEW TEAM OF SHOS IN A&amp;E MEDICINE</th>
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<tbody>
<tr>
<td>0800–0815 Coffee and welcome</td>
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<tr>
<td>0815–0845 Basic cardiac life support, demonstration and practicals</td>
</tr>
<tr>
<td>0845–0930 Advanced cardiac life support, lecture</td>
</tr>
<tr>
<td>0930–1130 Three practicals of 40 minutes each: practical skills training</td>
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<tr>
<td>(1) Arrhythmia recognition and defibrillation</td>
</tr>
<tr>
<td>(2) Bag-valve-mask ventilation and intubation</td>
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<tr>
<td>(3) Central venous cannulation, intravenous infusion, long saphenous cutdowns</td>
</tr>
<tr>
<td>1130–1200 Cardiac arrest, demonstration</td>
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<tr>
<td>1200–1230 Lunch</td>
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<table>
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<tr>
<th>TRAUMA</th>
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<tbody>
<tr>
<td>1230–1315 Initial management of trauma patient, lecture</td>
</tr>
<tr>
<td>1315–1400 Shock, lecture</td>
</tr>
<tr>
<td>1400–1430 Thoracic trauma, lecture</td>
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<tr>
<td>1430–1530 Two practicals of 30 min each: practical skills training</td>
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<tr>
<td>(1) Cervical spine x rays</td>
</tr>
<tr>
<td>(2) Head trauma</td>
</tr>
<tr>
<td>1530–1545 Tea</td>
</tr>
<tr>
<td>1545–1615 Multiple trauma resuscitation, demonstration</td>
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</tbody>
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| 1615–1745 Three trauma scenario practicals of 30 minutes each, scenario practice |
| (1) Pedestrian RTA |
| (2) Fall from height |
| (3) Motorcycle RTA |
| 1800 Close |

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Benefits of immediate printing of blood test results within an A&E department

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**Table:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Date of birth</th>
<th>Hospital No</th>
<th>Chemical Pathology</th>
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</thead>
<tbody>
<tr>
<td>16-Jun-43</td>
<td>Male</td>
<td>B99014325</td>
<td>Serum</td>
</tr>
<tr>
<td>Glucose</td>
<td>-</td>
<td>-</td>
<td>7.0 mmol/litre</td>
</tr>
<tr>
<td>Creatinine</td>
<td>-</td>
<td>-</td>
<td>102 mmol/litre</td>
</tr>
<tr>
<td>Urea</td>
<td>-</td>
<td>-</td>
<td>5.9 mmol/litre</td>
</tr>
<tr>
<td>Sodium</td>
<td>-</td>
<td>-</td>
<td>138 mmol/litre</td>
</tr>
<tr>
<td>Potassium</td>
<td>-</td>
<td>-</td>
<td>4.6 mmol/litre</td>
</tr>
<tr>
<td>Lactate dehydrogenase</td>
<td>-</td>
<td>-</td>
<td>295 IU/litre</td>
</tr>
<tr>
<td>Creatine kinase</td>
<td>-</td>
<td>-</td>
<td>82 units/litre</td>
</tr>
</tbody>
</table>

**Figure 1:** Laboratory result printout

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J Accid Emerg Med: first published as 10.1136/emj.13.2.149-b on 1 March 1996. Downloaded from http://emj.bmj.com/ on April 21, 2022 by guest. Protected by copyright.
Time to print label

Figure 2 Time course of results processing

providing hard copy of results as soon as they are available.

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Paracetamol overdose

EDITOR – In relation to the short report on paracetamol overdose by Hubert et al (volume 12, p 66), Evans Medical are currently varying the licence for Parvoxin in order to make the labelling consistent with current treatment guidelines.

The product licence variation has to be submitted to and approved by the MCA. Evans Medical are committed to updating the labelling as soon as possible and meanwhile would agree with the authors that the new guidelines of the UK Toxicology Group should be used in A&E departments.

FRANCIS UPCHURCH
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Anaphylactic shock

EDITOR – Dr Brown must be commended on the high quality review article on anaphylactic shock. The erudite and comprehensive discussion of the “adrenaline dilemma” is particularly welcome.

In considering the administration of fluids, while colloid may well restore the circulation more effectively than crystalloid, Dr Brown neglects to mention that the colloids solutions themselves are proven to cause anaphylaxis from a histamine releasing effect. As many patients react to more than one antigen, it may be safer to use crystalloids so as to minimise the chance of adding fuel to the fire.

I would urge emergency physicians to educate their general practice colleagues, as well as their patients, in anaphylaxis, because in the community it is an infrequent but intimidating problem.

In May 1994, the Chief Medical Officer urged that all patients suffering from peanut allergy should be referred to a specialist clinic.

The initiation of a supply of adrenaline and instruction in its use may be better supervised early on by an immunologist, given its side effect profile and the continuing uncertainty of dose and route; thereafter it can be monitored and rechecked by the general practitioner. As Epipen is still only available in the United Kingdom on a named patient basis, GPs can obtain only limited (if any) experience in its use. Adrenaline inhalers (Medihaler-Epi) give some relief, especially early in the attack, but again patients need training. Emergency physicians or immunologists will be more familiar with these preparations.

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The Patient’s Charter

EDITOR – I was interested in the short report by Cugnoni et al. In 1993 we carried out a related survey at Watford General Hospital (a suburban as opposed to inner city location). In addition to immediate assessment in accident and emergency (A&E) we evaluated the National Charter standard of waiting time for an emergency ambulance and the patient’s opinions as to the impact of the charter.

Over a six week period, 187 questionnaires were completed by A&E attenders, indicating that 62% were aware of the Patient’s Charter. Eighty six per cent of these were able to define it correctly. Sixty six percent of responders recognised that a standard time had been set regarding the waiting time for immediate assessment, of whom 44% acknowledged that it had been quantified and 47% correctly replied that when seen, it would be by a nurse and so that their need for treatment could be assessed (rather than by any other member of the department or any further examination or treatment occurring).

Seventy five per cent of responders perceived that the charter had also set a standard for the waiting time for an emergency ambulance, 34% of these appreciating that it was 14 minutes (in an urban area). The majority were unable to quantify it.

With respect to the respondents’ views of the effects of the charter on the emergency services, 46% believed that the initial waiting time in A&E had been altered – 64% thought for the better. Thirty four per cent considered that the charter had affected the time they waited for an emergency ambulance; of these, 46% thought the waiting time had been reduced.

Over 18% felt that the charter had been beneficial and 62% approved of the concept.

We found a greater awareness of the charter and its specific standards than the study carried out at St Bartholomew’s Hospital. However, we support the conclusions of Cugnoni et al, as we believe that our results probably also short st the hopes and expectations of both the patient and the NHS management executive.

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Chest drain insertion

EDITOR – We write with regard to the recent paper from Hassan and Keaney in which they cite wounding of the scapula as an unusual complication of chest drain insertion. The Advanced Trauma Life Support system teaches “do no further harm” and that the safe way to insert a chest drain is to make an incision anterior to the midaxillary line rather than directly over it. Had this protocol been followed the “complication” may have been avoided.

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