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LETTERS TO THE EDITOR

Thrombolysis in accident and emergency

EDITOR,—There now convincing data showing the benefit of thrombolytic treatment in acute myocardial infarction, and that benefit declines if this treatment is delayed.¹ There are, as Zoltie discussed,² problems identifying in accident and emergency (A&E) patients likely to benefit from thrombolysis and ensuring it is not delayed.

Audit revealed undesirable delays in thrombolysis in this hospital (despite a "fast track" referral system to cardiology) due to the very high bed occupancy rate in the

coronary care unit. One approach to expediting thrombolysis is for A&E doctors to initiate it.³ Before starting such a system we felt it important to establish whether the doctors' diagnostic accuracy was sufficient to allow safe and effective use of thrombolysis. We report the findings of a study that addressed this.

An algorithm was developed by cardiology and A&E (figure). Its aim was to encourage early thrombolysis in cases where benefit was most likely, but to encourage referral in less clear cut situations. The algorithm was distributed (with explanation and discussion) to A&E staff, who then used it in a "dry run". Patients with suspected myocardial infarction

Management of patients with suspected myocardial infarction in A&E

		Eligibility for thrombolysis		
		Yes	No	Total
CCU	Yes	10	3	13
	No	0	24	24
	Total	10	27	37

CCU, coronary care unit.

were referred to cardiology in the usual way, but the A&E doctor stated whether they felt thrombolysis was indicated. The diagnostic accuracy of A&E was assessed using subsequent management by cardiology as the gold standard.

Complete data were available for 37 patients (table). The level of agreement between the two specialties was high ($\kappa = 0.81$). The overall accuracy of A&E was 92% (95% confidence interval 78% to 98%), the sensitivity was 77% (46% to 95%), and the specificity was 100% (86% to 100%).

These data suggest that A&E doctors can identify patients requiring thrombolysis. It is planned to start A&E thrombolysis in this hospital, coupled with regular audit of diagnostic accuracy. While these results cannot necessarily be extrapolated, other units might find carrying such audit helpful, to ensure accuracy and safety if they already use thrombolysis, and to prompt changes if they do not.

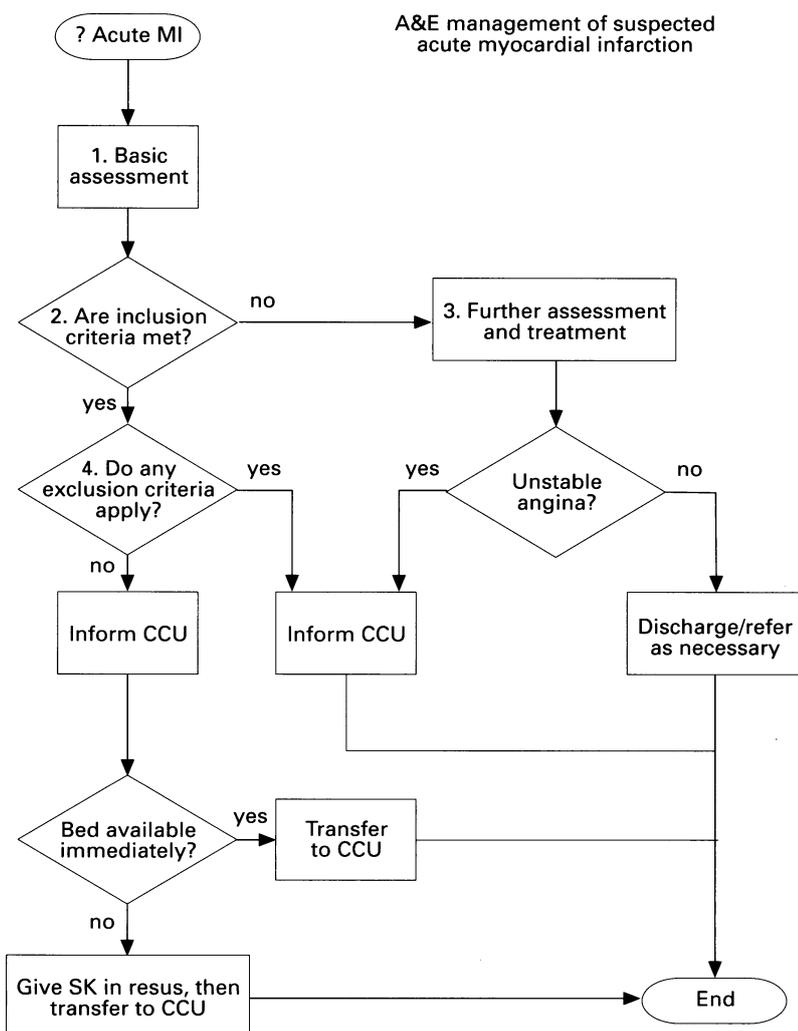
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- 1 Fibrinolytic Therapy Trialists' Collaborative Group. Indications for fibrinolytic therapy in suspected acute myocardial infarction: collaborative overview of early mortality and major morbidity results from all randomised trials of more than 1000 patients. *Lancet* 1994;343:311-22.
- 2 Zoltie N, Robertson G. Changing standards for thrombolysis in accident and emergency departments. *J Accid Emerg Med* 1995;12:132-3.
- 3 Nee PA, Gray AJ, Martin MA. Audit of thrombolysis initiated in an accident and emergency department. *Quality in Health Care* 1994;2:29-33.

Teaching advanced life support skills

EDITOR,—We read with interest the recent paper by Hall *et al*¹ concerning the teaching of advanced life support skills.

We have conducted similar courses for four years, under the auspices of the North West Thames Audit Group. This comprises the



Management of suspected acute myocardial infarction in accident and emergency.

consultant and middle grade staff of four adjacent accident and emergency departments.

We run half day "Mini Life Support" courses in cardiac, trauma, and paediatric resuscitation in August and February of each year. Senior house officers from the four participating hospitals are required to attend the courses, and locum cover is provided.

All lecturers are of provider or instructor status, as is the case in York, and we emphasise that these courses are not a substitute for the full courses. However, they do provide a framework for the safe management of the critically ill or injured patient in the first month of the SHO's post. We differ from the courses described in that half of our course is spent teaching practical skills in small group sessions. There are skill stations for x ray and electrocardiogram interpretation, practice on models, and moulage scenarios, with senior nursing staff acting as patients.

By combining a number of departments, and thus pooling the consultant and middle grade staff, we are able to teach in small groups with a minimum of one lecturer for each six participants.

It is currently not possible to ensure that all SHOs attend all three full life support courses in the first month of their post, but we hope that in the interim we are enabling them to act safely in the emergency situation.

We highly recommend this pooling of resources between hospitals as a practical way of ensuring that the new Senior House Officer is able to resuscitate effectively.

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- 1 Hall DJ, Williams MJ, Was AR. Life support courses for all. *J Accid Emerg Med* 1995;12:111-4.

Temporary A&E at the Whittington

EDITOR,—We wish to describe our experience with the provision of a full accident and emergency (A&E) service from an extended converted ward at the Whittington Hospital in North London between Wednesday, 2nd November, 1994, and Thursday, 8th June, 1995. This move was a result of the need for extensive refurbishment and expansion of the pre-existing department. The department currently sees 60 000 new patients per year.

The advantages of a total move out of the existing department site were a much shorter building programme time (30 weeks as opposed to 75 weeks without a move out) and the avoidance of disruption to patient services by lack of space and noise. The total cost of the project (decanting and rebuilding) was about £2 million.

A ward was identified on ground level on the hospital site which could be spared for the purpose. After preliminary discussion with the London Ambulance Service regarding

suitability, it was decided to proceed. The ward was upgraded by the provision of improved heating and lighting facilities. The day room was converted into a resuscitation area with two bays. Rooms were identified for treatment (including fracture reduction and plaster application) and for treatment of psychiatric (with panic button), gynaecological, and paediatric patients. A rest room was provided for A&E staff.

A Portacabin was installed in the adjacent courtyard to provide facilities for patient triage and registration, a waiting area, minor injury treatment and a dressing clinic. The Portacabin also contained lavatories and telephone facilities for the general public. The ward and the Portacabin were linked by a specially created corridor.

During the decanting period traffic flow was redirected through the hospital roadways so as to allow ambulance access at all times to the courtyard adjacent to the temporary department to allow the setting down of patients. A temporary rampway was built on the outside of the ward so that ambulance stretcher cases could gain access to the A&E department through a window converted into a doorway. Ambulant patients and those arriving in private vehicles gained access to the department through the main outpatient entrance and followed a coloured strip laid on the floor to the department. Stretchers, wheelchairs, and resuscitation equipment were available at the main outpatients entrance.

The only facility lost during this period was the overnight stay ward. Operational policies were altered whereby patients normally kept in this ward were either admitted to a general ward or observed within the A&E department.

During this period expected admissions continued to be seen in the A&E department. A 30 minute response time to attend to these patients was agreed by all Directorates concerned. Children were assessed on paediatric wards when a second opinion was requested.

In-hospital communication was facilitated by a weekly newsletter which was widely distributed. The general public were kept informed through posters, newspapers, local radio, and the Community Health Council.

During this period no specific complaints were received about the layout of the department. This may have been because it was perceived to be a temporary situation. No formal audit of patient satisfaction was carried out. Patient Charter standards were upheld. The monthly figure for patients assessed by a nurse on arrival was consistently over 90%. No clinical mishaps could be attributed to the move. The major incident policy (suitably modified) was satisfactorily implemented on one occasion. The department did not close to emergencies at any stage. Operationally, the only problem was caused by separation of the major and minor areas causing difficulty in communication between the areas.

The state of old A&E departments, designed for smaller workloads, often proves to be unsatisfactory. It is quite possible to achieve a total upgrade by moving out completely from the site of development with minimal disruption to patients if alternative accommodation can be provided within the hospital.

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Skin necrosis in prolonged application of an elasticated wrist splint in a psychiatric patient

A 51 year old woman attended our department accompanied by a community support worker after a fall onto an outstretched right hand. She had tenderness in the anatomical snuff box and pain on gripping. Scaphoid radiography was normal. In accordance with our normal practice, a splint was applied to her right wrist, and a follow up appointment made for 14 days' time.

She defaulted from follow up but returned with her support worker three weeks after the injury complaining of a rash on her right wrist. Examination showed a heavily soiled splint, and deep dermal pressure sores (figure) There was evidence of early cellulitis around the wrist.



Her tenderness persisted, but repeat radiography was normal. A large new splint was applied over generous padding, antibiotics prescribed and the arm elevated. Follow up was arranged and emphasised to the patient and the support worker.

Pressure sores have been described with other appliances¹ and this case emphasises the importance of caution in using appliances in patients who may not be able to appreciate fully any problems which arise. The presence of a support worker should also alert us to an increased risk of problems developing.

My thanks to Mr A Fraser-Moody.

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- 1 Hewitt SM. Skin necrosis caused by a semi-rigid cervical collar in a ventilated patient with multiple injuries. *Injury* 1994;25:323.

EDITOR,—After having read the article on the removal of fish bones from the throat in your December 1995 issue, two observations could be made. The first is that a set of nasal dressing forceps, although not as long as a pair of Magill's forceps, is a much finer instrument which would have a better chance of removing an impacted fishbone, especially if small, without breaking it. The second is that the text describes removal of fish bones in the sitting position, which is advocated by most otolaryngological books, but the photograph gives the impression that the patient is lying down.

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