LETTERS TO THE JOURNAL

Myocardial infarction and left bundle branch block

EDITOR—We congratulate Edhouse et al1 on their attempt to try and produce some clarity in the murky waters of diagnosing and treating patients with acute myocardial infarction (AMI), who present with left bundle branch block (LBBB). Unfortunately, we feel that the study has some limitations that could provide for some confusing “take home” messages. There are four points to consider:


The authors reply

We welcome the opportunity to discuss the points raised by Mohammed et al. Our data include all patients with acute chest pain and left bundle branch block (LBBB) on presentation or within 12 hours of admission. Thus we have complete data on all patients with LBBB and acute myocardial infarction (AMI) during the study period.

Mohammed states that a 52% prevalence of AMI is unusually high, and claims the prevalence of 28% quoted by Shlipak is a “more representative” figure, but provides no evidence to support this assertion. Hands et al found a prevalence of 57%, a figure very similar to our own. We note that Shlipak mistakenly attributes a prevalence of 25% to the study by Hands.

The recommendation that all patients with chest pain and LBBB receive thrombolysis is correct and evidence-based, but is also rather simplistic. This is reflected in the significant under-use of thrombolysis both in the UK and the United States, and the lengthy treatment delays these patients experience.2

At least half the patients with LBBB and chest pain are not infarcting. While the overall mortality reduction justifies the administration of thrombolysis to all such patients, this does not make the decision to treat an individual patient any easier. It is hard to think of another circumstance in which we expose patients to a significant stroke risk on the strength of a diagnosis of which we are only 50% certain.

Management decisions are further complicated if the presentation is not classic, or if relative contraindications exist. The decision to administer thrombolysis, especially in the elderly population, is often a careful balancing act between potential benefit and complication risk. The manifest reluctance of doctors to expose patients to significant risk without a definite diagnosis is perfectly understandable, and merely re-emphasizes the guidelines does not help the clinician at the sharp end.

We acknowledge the limitations of our small, retrospective study. Nevertheless, the differences between our results and those of Shlipak are intriguing. Thrombolytic change evolves over time, even in the presence of LBBB. If only the presenting ECG is analysed, evolving changes will be missed and the sensitivity of the predictive criteria under-estimated, particularly if patients present early in the course of their infarct.

Shlipak noted the ECG criteria infrequently; in contrast we found at least one of the criteria in 19 of 24 patients with AMI.2 When we analysed only the first ECG, the presence of any of the criteria indicated a diagnosis of AMI with sensitivity = 62.5%. A series of ECGs was available in only 33% of patients, but incorporating even this small number into the analysis increased the sensitivity of the criteria to 79% (specificity 100%). We note that in Shlipak’s study only the presenting ECG was analysed.3

Our unpublished data on 797 consecutive patients presenting with AMI revealed a median interval between onset of pain and arrival at hospital of 135 minutes, when we had audit data from the United States report a median of 89 minutes.4 A relatively early presentation, coupled with analysis of only the first ECG, may partly explain the low sensitivity found in Shlipak’s study.

Our findings strongly support those of Sgarbossa in showing that a significant number of infarcting patients can be identified quickly and confidently regarding their need for thrombolysis.5 This is of immediate practical benefit to clinicians and should facilitate considerable reductions in treatment delays. Thrombolysis should also be recommended when contraindications are absent, along with an individual risk benefit assessment to allow patients to participate in the management decision. Where patients do not receive immediate thrombolysis serial ECGs are essential; if evolving changes indicate a definite infarct, the balance of risk and benefit may change considerably.

JUNE EDHOUSE
Consultant in Accident and Emergency Medicine, Stepping Hill Hospital, Poplar Grove, Stockport SK2 7JE

F P MORRIS
Consultant in Accident and Emergency Medicine, Northern General Hospital, Sheffield

Correspondence to: Miss Edhouse


Pedestrian injuries sustained in negotiating traffic calming measures

EDITOR,—We have recently seen two patients who were injured while walking across raised traffic-calming features (fashioned as polystyrene blocks). The first patient, a 56 year old woman could not walk on the pavement as it was blocked by cars. In negotiating the traffic restraint she failed to clear the restraint and caught her foot, stumbling forwards onto both of her
We feel it unlikely that ours are the only injuries caused by this mechanism.

K RAJESH
Registrar in Orthopaedics
M E LOVELL
Consultant Orthopaedic Surgeon
South Manchester University Hospitals, National
Health Service Trust, Department of Orthopaedic
Surgery, Withington Hospital, Withington, Manchester M20 8LR

Correspondence to: Mr Lovell

**Shock and ipsilateral pulmonary oedema**

EDITOR,—I had a distinct deja vu phenomenon on reading the article by Desai and colleagues.1

In 1970 (30 years ago) David Trapnell and I reported four patients with unilateral pulmonary oedema after pleural aspiration.2 This paper described two patients with pneumothorax but also two with pleural effusions. One of the patients, an 18 year old, died.

The common feature of these four patients was that the air or fluid had occupied the pleural space for some time and were not acute presentations. We concluded "It is established practice in genito-urinary circles to decompress the bladder of a patient with chronic urinary retention slowly. Acute retention is relieved rapidly after insertion of a urethral catheter. We would like to suggest that the same principle of therapeutic relief be applied to the pleural space". We believed that this important concept had not been reported previously in a group of patients and felt that medical practitioners treating chronic or relatively longstanding pleural effusions or pneumothoraces should be aware of the need to decompress the pleural space with caution.

J G B THURSTON
Clinical Director,
Accident and Emergency Department, Joyce Green Hospital, Dartford, Kent DA1 5PL


---

**NOTICE**

**Outpatient Parenteral Therapy—Beyond 2000**

17–22 September 2000, Fairmont Resort, Leura, Sydney, Australia

Further details: OPAT 2000 Meeting Secretariat, Conference Action Pty Ltd, PO Box 1231, North Sydney, NSW 2059, Australia (tel: +61 2 9956 8333, fax: +61 2 9956 5154, e-mail: confact@conferenceaction.com.au).