

Correspondance

Getting to the stable door before the horse has bolted

Alan Ogborne has given an accurate synopsis of the identification and treatment of patients with alcohol-related problems and has delineated what is currently thought of as best practice.<sup>1</sup> However, although he recognizes that much identifiable alcohol misuse is not clinically overt<sup>2</sup> he nevertheless advocates the CAGE questionnaire<sup>3</sup> for use in primary care; a more detailed alcohol history is only indicated if such questioning or a physical examination is positive. This approach identifies only the tip of the iceberg: it misses hazardous drinkers before they start to become dependent.<sup>4</sup>

A more proactive method is used in the Department of Emergency Medicine at St. Mary's Hospital, London, United Kingdom, where the Paddington Alcohol Test ([www.cma.ca/cmaj/vol-164/issue-3/0323a.htm](http://www.cma.ca/cmaj/vol-164/issue-3/0323a.htm)) has been developed over the last 7 years.<sup>5-8</sup> This test is easy (only 3 questions) and takes less than 1 minute to administer. It has been designed to identify misusers at an early stage, at which brief motivational interventions are more effective, and allows treatment to be started earlier. The test is given to all patients presenting with one or more of the "top 10" presenting complaints for which alcohol misuse may be considered a root cause. The test is given at the end of the consultation when the patient's initial agenda has been satisfied.

In the modern context of rationing, evidence-based care and governance, we must move more effectively (that is, earlier) on alcohol misuse.

**J.S. Huntley**  
Senior House Officer

**R. Touquet**  
Consultant  
Department of Accident and Emergency Medicine  
St. Mary's Hospital  
London, UK

References

- Ogborne AC. Identifying and treating patients with alcohol-related problems. *CMAJ* 2000;162(12):1705-8.
- Malla A, Merskey H. Screening for alcoholism in family practice. *Fam Pract* 1987;6:138-47.
- King M. At risk drinking among general practice attenders: validation of the CAGE questionnaire. *Psychol Med* 1986;16:213-7.
- Murgraff V, Parrott A, Bennett P. Risky single-occasion drinking amongst young people — definition, correlates, policy, and intervention: a broad overview of research findings. *Alcohol Alcohol* 1999;34:3-14.
- Green M, Setchell J, Hames P, Stiff G, Touquet R, Priest R. Management of alcohol abusing patients in accident and emergency departments. *J R Soc Med* 1993;86:393-5.
- Smith SG, Touquet R, Wright S, Das Gupta N. Detection of alcohol misusing patients in accident and emergency departments: the Paddington alcohol test. *J Accid Emerg Med* 1996;13:308-12.
- Wright S, Moran L, Meyrick M, O'Connor R, Touquet R. Intervention by an alcohol health worker in an accident and emergency department. *Alcohol Alcohol* 1998;33:651-6.
- Huntley J, Blain C, Hood S, Touquet R. Paddington alcohol test. *J Accid Emerg Med*. In press.

Treating acute myocardial infarction

In reading the article by Louise Pilote and colleagues on changes in the treatment and outcomes of acute myocardial infarction in Quebec<sup>1</sup> and the related commentary by Arthur Dodek<sup>2</sup> I am reminded of the saying that to a hammer everything looks like a nail.

The authors of both articles speak from the viewpoint of the cardiology clinic and the catheterization suite. Although the results that they present are laudable, ascribing them to "increased use of thrombolytic agents and, more importantly, the increased use of angiography and revascularization procedures"<sup>2</sup> ignores the bigger picture.

In my environment, an Ontario tertiary care centre, the vast majority of patients who have a myocardial infarction are treated by emergency physicians and never have primary angiography. This stems from a variety of factors, the most obvious being the lack of availability of angiography outside of

business hours. Despite this I would hazard that our statistics on infarct survival mirror the Quebec trend of improvement. Why is this? It is because of an organized emergency medical pre-hospital system and skilled emergency department staff. If there is an increased use of thrombolytic agents, it must partly, if not completely, be due to the increased thrombolysis in the emergency department.

The time has come to recognize that initial care of patients with myocardial infarction is usually not delivered by the cardiologist but by the emergency physician, often under conditions far more chaotic and stressful than those in the average coronary care unit. To ignore this and only focus on the portion of care delivered by cardiologists is scientific inaccuracy bordering on arrogance.

**Daniel Kollek**

Associate Professor of Emergency Medicine  
Hamilton Health Sciences Corporation  
Hamilton, Ont.

References

- Pilote L, Lavoie F, Ho V, Eisenberg MJ. Changes in the treatment and outcomes of acute myocardial infarction in Quebec, 1988-1995. *CMAJ* 2000;163(1):31-6.
- Dodek A. Acute myocardial infarction in Canada: improvement with time [commentary]. *CMAJ* 2000;163(1):41-2.

Louise Pilote and colleagues have provided a timely stock taking of current treatments and outcomes of acute myocardial infarction.<sup>1</sup> Commentator Arthur Dodek confidently assures the reader that with "contemporary specialized cardiology care the outcome may be as good as it gets."<sup>2</sup> However, effective alternatives to thrombolytic therapy and revascularization may be needed for patients who have a cardiac crisis far from a fully equipped hospital.

One modern modality perhaps overlooked in both articles is magnesium therapy. In terms of availability, effec-

tiveness, safety and portability, parenteral magnesium would appear to offer the epitome of efficacy in such situations. It also has many features friendly to the heart.<sup>3</sup>

Much has been written about the ubiquitous magnesium salts, which until fairly recently were primarily used to treat gastrointestinal problems and preeclampsia. Seelig and colleagues outlined a wide range of studies showing positive results in acute myocardial infarction,<sup>4</sup> one impressive large study being LIMIT-2.<sup>5</sup> Whereas others demonstrated no benefit,<sup>6</sup> Frakes and Richardson advocate the use of magnesium in a handful of emergency situations.<sup>7</sup> The MAGIC study, involving 10 400 high-risk patients, is currently in progress<sup>8</sup> and results are expected soon. I would like to see a study performed in which intravenous magnesium is given earlier than the 6-hour limit entered in the MAGIC protocol. Delaying and playing second fiddle may have contributed to the inferior results in some studies.<sup>6</sup>

#### William D. Panton

Physician (ret'd)  
Burnaby, BC

#### References

- Pilote L, Lavoie F, Ho V, Eisenberg MJ. Changes in the treatment and outcomes of acute myocardial infarction in Quebec, 1988-1995. *CMAJ* 2000;163(1):31-6.
- Dodek A. Acute myocardial infarction in Canada: improvement with time [commentary]. *CMAJ* 2000;163(1):412.
- Rabbani R, Antman EM. The role of magnesium therapy in myocardial infarction. *Clin Cardiol* 1996;19:841-4.
- Seelig MS, Elin RJ, Antman EM. Magnesium in acute myocardial infarction: still an open question. *Can J Cardiol* 1998;14:745-9.
- Woods KL, Fletcher S, Roffe C, Haider Y. Intravenous magnesium sulfate in suspected acute myocardial infarction: results of the 2nd Leicester Intravenous Magnesium Intervention Trial (LIMIT-2). *Lancet* 1992;339:1553-8.
- ISIS-4 Collaborative Group. ISIS-4: a randomised factorial trial assessing early oral captopril, oral mononitrate, and intravenous magnesium sulfate in 58,050 patients with suspected myocardial infarction. ISIS-4 (fourth international study of infarct survival). *Lancet* 1995;345:669-85.
- Frakes MA, Richardson LE. Magnesium sulfate therapy in certain emergency conditions. *Am J Emerg Med* 1997;15:182-7.
- The MAGIC Steering Committee. Rationale and design of the magnesium in coronaries (MAGIC) study: a clinical trial to reevaluate the efficacy of early administration of magnesium in acute myocardial infarction. *Am Heart J* 2000;139(1 Pt 1):10-4.

#### [One of the authors of the research article responds:]

The decrease in mortality related to acute myocardial infarction in Quebec is good news.<sup>1</sup> However, it is difficult to isolate the exact reasons for this decline. Daniel Kollek is right to point out the role of prehospital and emergency room care; the decrease in mortality should encourage health care professionals involved at all stages of caring for patients with acute myocardial infarction to continue to work to ensure delivery of the type of care that has been shown to be effective.

Our data do not allow us to reach a firm conclusion about the role of primary angioplasty in the care of these patients. The decline in mortality might have been greater had primary angioplasty been more readily available in Quebec.

William Panton suggests the use of magnesium therapy for patients admitted to hospitals that are not fully equipped to carry out invasive cardiac procedures. Thrombolytic therapy certainly can be used in peripheral hospitals and it is more effective than use of magnesium sulfate. Magnesium sulfate has been extensively studied; its effectiveness remains controversial in view of the contradictory conclusions of a meta-analysis and a large clinical trial. Before we push the use of controversial treatments, we should maximize the use of treatments that are known to be effective.

#### Louise Pilote

Assistant Professor of Medicine  
McGill University  
Montreal, Que.

#### Reference

- Pilote L, Lavoie F, Ho V, Eisenberg MJ. Changes in the treatment and outcomes of acute myocardial infarction in Quebec, 1988-1995. *CMAJ* 2000;163(1):31-6.

#### [The author of the commentary responds:]

Daniel Kollek has made a good point in that most patients with acute myocardial infarction are seen initially by emergency physicians. In

most cases, emergency physicians now commence thrombolytic therapy. The increased use of thrombolytic agents has been associated with reduced mortality and improved outcomes in the treatment of patients with acute myocardial infarction.<sup>1</sup>

However, there are additional factors that may contribute to reductions in in-hospital mortality as well to reductions in mortality following hospital discharge: increased use of medications such as  $\beta$ -blockers, angiotensin-converting-enzyme inhibitors and lipid-lowering agents;<sup>2</sup> and increased use of angiography and revascularization procedures.<sup>3</sup>

Although "primary coronary angioplasty may be the optimal treatment of acute myocardial infarction,"<sup>3</sup> it is available in only 10% of hospitals and therefore we must rely on prompt treatment with thrombolysis, which is delivered diligently by Kollek and other emergency room physicians.<sup>4</sup> This pattern of practice has improved patients' outcomes.

#### Arthur Dodek

Clinical Professor of Medicine  
University of British Columbia  
Vancouver, BC

#### References

- ISIS-3 (Third International Study of Infarct Survival Collaborative Group). ISIS-3: a randomized comparison of streptokinase vs. tissue plasminogen activator vs. anistreplase and of aspirin plus heparin vs. aspirin alone among 41 299 cases of suspected acute myocardial infarction. *Lancet* 1992;339:753-70.
- Pilote L, Lavoie F, Ho V, Eisenberg MJ. Changes in the treatment and outcomes of acute myocardial infarction in Quebec, 1988-1995. *CMAJ* 2000;163(1):31-6.
- Dodek A. Acute myocardial infarction in Canada: improvement with time [commentary]. *CMAJ* 2000;163(1):412.
- Lee TH, Weisberg MC, Brand DA, Rouan GW, Goldman L. Candidates for thrombolysis among emergency room patients with acute chest pain. *Ann Intern Med* 1989;110:957-62.

#### Gauging the health of our health care system

In a *CMAJ* commentary,<sup>1</sup> Noralou Roos says, "although only 20% of Canadians report having confidence in the health care system, more than 50% say that the medical care they and their