

In 1993, long before the recommendation by the Emergency Cardiac Care Coalition that emergency physicians treat patients with a clear diagnosis of AMI within 30 minutes,⁴ we designed a quality-improvement project to decrease doorto-needle time. We decreased the median elapsed time from admission to thrombolysis for all patients with an AMI from 62 to 40 minutes.⁵

Since then, emergency physicians across this country have achieved spectacular improvements. Centenary Health Centre in Scarborough, Ont., has reduced times to 29 minutes, and the average time at the Hamilton Civic Hospitals is 21 minutes, according to information from those hospitals. Concern is now voiced that further reductions may be achieved only with a rising cost of physician error and patient complications.

The picture of thrombolytic treatment represented in the article by Cox and colleagues no longer exists. Are Canadian physicians up to the challenge? Yes. This question has been clearly answered both in emergency medicine literature, and in practice in emergency departments across this country.

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References

- The GUSTO Investigators. An international randomized trial comparing four thrombolytic strategies for acute myocardial infarction. N Engl J Med 1993; 329:673-82.
- Ridker PM, O'Donnell CJ, Marder VJ, Hennekens CH. A response to "Holding GUSTO up to the light." Ann Intern Med 1994;120:882-4.
- 3. Farkouh ME, Lang JD, Sackett DL. Thrombolytic agents: the science of the art of choosing the better treatment. *Ann Intern Med* 1994;120:886-8.
- 4. The Heart and Stroke Foundation of Canada, the Canadian Cardiovascular Society and the Canadian Association of

- Emergency Physicians, for the Emergency Cardiac Care Coalition. Recommendations for ensuring early thrombolytic therapy for acute myocardial infarction. *Can Med Assoc J* 1996;154:483-7.
- Markel KN, Marion SA. CQI: improving the time to thrombolytic therapy for patients with acute myocardial infarction in the emergency department. J Emerg Med 1996;14:685-9.
- Heart-felt change: improving the care of acute myocardial infarction patients. *Informed* 1996;2(2):11-12.

[Three of the authors respond:]

Dr. Markel highlights some of the advances that have been made in emergency departments across Canada to achieve more rapid administration of thrombolytic drugs to patients with an AMI.

Our article addressed the issue of treatment times within the context of the GUSTO-I study. We did not state that door-to-needle times remained uniformly and unacceptably long "now," nor did we "discredit" the advances achieved by some Canadian emergency medicine practitioners. On the contrary, we specifically stated, "Since GUSTO-I was completed, many hospitals in Canada have embarked on quality improvement programs that include attention to prompt use of thrombolytic therapy."

We would like to share Markel's belief that further progress on this front is neither possible nor necessary, and we could add to his list of positive examples. But the hospitals that are measuring, improving and reporting their door-to-needle times are unlikely to be those where delays are occurring. We accordingly urge continuing surveillance by all centres to ensure that this area of practice is optimized.

We agree with Markel that it is important to administer these drugs in the emergency department, and that waiting for an internist or cardiologist to review the case contributes to delays. However, the data show that median door-to-needle times in GUSTO-I were longer than ideal for

all participating countries. We have no evidence that administration of thrombolytic agents from 1990 to 1993 was any more "under the guidance and control" of specialists in Canada than in other participating countries.

Our study reaffirmed the troubling findings of others that subgroups of patients, including elderly patients, tend to be relatively more affected. It remains incumbent on all of us who manage patients with AMI to ensure that any improvements in the process of care are applied to all eligible patients.

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Facing breast cancer far from radiation therapy centres

Patterns of initial management of node-negative breast cancer in two Canadian provinces" (Can Med Assoc J 1997;156:25-35), by Dr. Vivek Goel and associates, and the accompanying editorial "A surgical subculture: the use of mastectomy to treat breast cancer" (Can Med Assoc J 1997; 156:43-45), by Dr. Adalei Starreveld. We would like to provide a different perspective, as surgeons in a community where facilities for radiation therapy are not readily accessible to patients with breast cancer. Our point