Correspondence
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Spinal surgery in Canada

McIntosh and his colleagues ("The incidence of spinal surgery in Canada" [*Can J Surg* 1998; 41(1):59-66]) have taken on the gargantuan task of measuring the incidence of spinal surgery in 5 provinces in Canada. As their laudable aim, implied in the introduction of their paper, is to explain the soaring costs of treating back pain, their results must be interpreted in the correct context.

The rate of spinal surgery that they have reported (80 per 100 000 population) includes surgery for categories of disease other than back and neck pain caused by degenerative diseases (e.g., disc disease, spinal stenosis, spondylolisthesis) such as deformities, tumours, fractures, infections, congenital and developmental conditions of the spine. It is possible that the prevalences of one or more of these conditions are different in the 5 provinces.

Ken Yong-Hing, MB ChB
Division of Orthopedics
Department of Surgery
University of Saskatchewan
Saskatoon, Sask.

Radiographic images

I was dismayed, again, to see in the *Canadian Journal of Surgery* misrepresentation of radiographic studies. I refer to Fig. 2 of the article by Baslaim and deVarennes on localized idiopathic fibrosing mediastinitis as a cause of superior vena cava (SVC) syndrome (*Can J Surg* 1998;41[1]:68-71). The legend for this figure reads: Computed tomography scan (top) and magnetic resonance image (bottom) . . . ." In fact, both images are from a magnetic resonance scan.

A further concern relates to the interpretation of the images. The arrow in the top image (a transverse slice, T_1 weighted) seems not be pointing to the pathologic feature, which appears to be the doughnut-shaped structure immediately anterior to the tip of the arrow, with the residual superior vena cava lumen being the hole in the doughnut.

Both images are apparently T_1 weighted; however, comparison of the 2 reveals apparent differences in tissue densities. This may be due to contrast injection for the lower image.

Yet a further concern relates to Fig. 1 from the same article. The radiographic quality of this image is questionable (or maybe it is the reproduction that is at fault). Certainly the image in the printed journal does not show the features that would indicate occlusion of the SVC by an apparent tumour. (It seems to me to show partial SVC obstruction by a filling defect — most likely a thrombus.)

These concerns lead me to ask: Does the journal have a regular review by a qualified person of the radiographic images it prints? Is there any requirement for authors using radiographic images to have asked for the guidance of the imager responsible for the images before submitting manuscripts?

Unfortunately this is not the first time I have noticed problems with the radiographic images in the *Canadian Journal of Surgery*. This is, however, the first time I have been moved to comment, and it is with some hesitancy that I do so, as I realize that the few images reproduced are not the primary thrust of the journal.

Richard N. Rankin, MB ChB
Chair, Department of Radiology and Nuclear Medicine
University of Western Ontario
London, Ont.

[The Editor responds]

Dr. Rankin is correct regarding the image in question being from a magnetic resonance scan and not a computed tomography scan. The *Canadian Journal of Surgery* does not have a radiologist review the published images nor do we request of the authors a certified interpretation. As observed, the images are not our major thrust, although the editors and reviewers do their best to ensure quality.

Jonathan L. Meakins, MD

Trauma outcomes

We have read with interest the paper by Allen, Hicks and Bota on trauma outcomes (*Can J Surg* 1998;41[1]:53-8). The collection and publication of their data are a tribute to the process of regional designation of trauma centres in Ontario. Their work is evidence of enhanced education of trauma providers over the past decade, since publication of the Major Trauma Outcome Study.[1]

Two of the authors' conclusions, however, bear scrutiny: (1) that foregoing the availability of "stringent" requirements in the Trauma Association of Canada (TAC) guidelines will facilitate treatment; and (2) the implication that meeting TAC guidelines is not required for optimal trauma system delivery.

With respect to physician recruitment, the TAC accreditation is a voluntary process, offered to tertiary, district and rural trauma centres. To date, only one district facility has been

accredited. The process has not been required or mandated by provincial ministries of health. Many factors are responsible for difficulty in recruiting surgeons to remote communities, including lack of facilities and colleague support. It is not clear how a hospital that has not sought TAC district trauma centre accreditation can fault these same guidelines for difficulties in recruitment. A majority of surgeons would likely find enhanced facility, organizational and personnel support, not to mention peer recognition, positive factors when considering a practice environment. The development of organized regional trauma care has improved the outcome for the severely injured. Proceedings of the TAC/Canadian Association of Emergency Physicians joint symposium, held at the annual meeting of the Royal College of Physicians and Surgeons of Canada in Vancouver in 1997, reviewing this issue, are currently being prepared for submission to the *Canadian Journal of Surgery*.

Virtually all centres reporting trauma outcomes currently have positive survival Z scores, reflecting progress in trauma care. TRISS remains a limited method of assessing patient outcome and quality of trauma care.[2–4] Audits of delays in diagnosis, intervention, death reviews and external verification are all essential elements in gauging the quality of a trauma centre and its system.

The TAC guidelines represent a consensus of physicians from across Canada with years of experience and commitment to trauma care. Many of them have been involved in more than 1000 major trauma resuscitations. Firm consensus existed that optimal initial trauma management was provided when a minimum of 2 physicians were present during the assessment and resuscitation process. Furthermore, tertiary and district centres have functional intensive care units. The expectation of 2 in-house physicians should be maintained for safe provision of care. Particularly in these times of cutbacks and restraints, physicians should use the tools available, including the TAC guidelines, to ensure that quality health care is preserved and improved.

John B. Kortbeek, MD
Richard Simons, MB ChB
B.J. Hancock, MD
Regional Trauma Services
Calgary Regional Health Authority
Foothills Medical Centre
Calgary, Alta.

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4. Demetriades D, Chan LS, Valmahos G, Berne TV, Cornwell EE 3d, Belzberg H, et al. TRISS methodology in trauma: the need for alternatives. *Br J Surg* 1998;85(3):379-84.

[Dr. Bota responds]

Drs. Kortbeek, Simons and Hancock have expressed concern over 2 aspects of our paper. Our comments with regard to recruitment are supported by the TAC guidelines, which acknowledge that surgical consultation is *not* required in-house 24 hours a day but need only be available with a maximum of a 20-minute response time. Allowing in-house emergency medicine specialists to serve as trauma team leaders has the potential to improve lifestyle and job satisfaction of various surgical specialists and thus ease recruitment and retention of these individuals. On this issue we are in full agreement with Dr. Kortbeek and his colleagues.

However, the TAC guidelines require the presence of 2 physicians in-house capable of providing advanced airway management and initial resuscitation at all times. Our data suggest that having a single in-house, experienced staff emergency physician complemented by well-trained nursing staff and ancillary personnel can be an effective alternative to what often proves to be 2 in-house residents or fellows.

A timely article by Brasel, Akason and Weigelt[1] recently reviewed the cost of staffing a dedicated operating room for urgent trauma cases. They stated that "it seems that a dedicated OR for trauma similar to other QI trauma filters that have not been shown to adversely effect outcome."

Although we support the majority of TAC guidelines, all recommendations that lack high levels of evidence should be open for reassessment.

Gary W. Bota, MD
Medical Director
Trauma and Emergency Medicine
St. Joseph's Health Centre
Sudbury, Ont.

Reference

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