

ter financial opportunities are available in the private realm.

Thus far, Canadians have chosen the ethical principle of distributive justice over that of autonomy as the foundation of their health care system. It will take a great deal of dedication and persistence from medicare's supporters to keep this foundation from crumbling.

A meaningful and accurate understanding of waiting lists that is transparent to physicians, patients and politicians is one important step in helping maintain our commitment to a system that has served Canadians so well for so long.

Michael Gordon

Head, Geriatrics and Internal Medicine
Baycrest Centre for Geriatric Care
North York, Ont.

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Competency of adolescents to make informed decisions

Christopher Doig and Ellen Burgess have carefully and accurately researched the rights of adolescents to accept or refuse life-sustaining treatment.¹ Pediatricians, family physicians, surgeons, nurses and paramedical staff caring for teenagers are aware of the necessity to respect the wishes of their patient, even if the patient makes decisions that are contrary to the wishes of his or her parents or the judgement of those responsible for his or her treatment.

The competency of children and adolescents to make informed decisions, if they understand the nature and consequence of that decision, has been examined by many professional bodies,²⁻⁴ including the Canadian Paediatric Society,⁵ the American Academy of Pediatrics and the Society for Adolescent Medicine.^{6,7} There have also been court decisions in Canada, the United States and the United Kingdom, as cited by the authors, supporting this principle.

Where the minor's decision differs from that of parents or caregivers, ethical considerations demand compassionate counselling for decision-making but the wishes of the patient must never be overridden. I am appalled that the hospi-

tal's legal counsel ignored this minor's rights. Was he or she more concerned about the hospital's potential liability than about the child?

Martin G. Wolfish

Past-President
Canadian Paediatric Society
Past-President
Society for Adolescent Medicine
North York General Hospital
Toronto, Ont.

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β-Blockers as first-line therapy for hypertension

The 1999 Canadian recommendations for the management of hypertension¹ recommend against first-line β-blocker therapy for uncomplicated hypertension in the elderly and suggest that dihydropyridine calcium-channel blockers are preferable. β-Blockers had previously been recommended as alternative first-line agents.² The new recommendation is apparently based on results of the MRC,³ STOP-Hypertension⁴ and Syst-Eur⁵ trials. We question whether the evidence truly supports this change.

In the MRC trial, a preplanned subgroup analysis suggested that β-blockers are ineffective. However, over 25% of subjects were lost to follow-up, a fig-

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ure exceeding the number of cardiovascular events in the trial. Furthermore, patients on β -blockers had significantly higher blood pressure than those on diuretics, raising the possibility that there were unmeasured differences between the groups or that the patients on β -blockers may have been undertreated despite guidelines for additional agents to achieve blood pressure control.

Uncertainty about β -blocker effectiveness following the STOP-Hypertension trial arose from the finding that 78% of the subjects on β -blockers required a second agent to achieve target blood pressure compared with 46% of the subjects on diuretics.² However, β -blocker doses were not maximized when in fact among older adults with hypertension, β -blockers at appropriate doses lowered blood pressure to an extent similar to that seen with other agents.⁶⁻⁹

Evidence supporting the use of calcium-channel blockers over β -blockers for hypertension in the elderly is not conclusive. While the Syst-Eur trial demonstrated that use of nitrendipine resulted in fewer cardiovascular events than placebo, there was no β -blocker group for comparison. Despite a small reduction in the incidence of dementia, further research is needed to determine agents of choice, particularly in light of a recently described association between dementia and older calcium-channel blockers.¹⁰

Finally, the STOP-Hypertension-2 trial¹¹ compared first-line β -blockers and diuretics with angiotensin-converting-enzyme inhibitors and calcium-channel blockers. There were no differences in cardiovascular outcomes. Efficacy for blood pressure lowering, tolerability and the need for additional agents were equivalent among all groups.

Although the case against β -blockers is weak, β -blockers at appropriate doses have yet to be compared with other first-line therapies, other than in the MRC trial. The sixth report of the United States Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure recommends an initial ap-

proach with diuretics supplemented if necessary with β -blockers.¹² Perhaps this more accurately reflects the available evidence.

George A. Heckman
Alexandra Papaioannou
 Division of Geriatric Medicine
William Parkinson
 Department of Rehabilitation
Christopher A. Patterson
 Division of Geriatric Medicine
 McMaster University
 Hamilton, Ont.

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Unintended subcutaneous and intramuscular injection by drug users

There was a recent epidemic of unexplained illness and death among injection drug users in Scotland, Ireland and England. The syndrome-based case definition was soft-tissue inflammation (abscess, cellulitis, fasciitis or myositis) at an injection site and either severe systemic toxicity (sustained systolic blood pressure < 90 mm Hg despite volume replacement and total peripheral white blood cell count > 30.0 × 10⁹ cells/L) or postmortem evidence of a diffuse toxic or infectious process including pleural effusions and soft-tissue edema and necrosis.¹ For a significant number of cases that met the case definition, there was laboratory evidence of clostridial infection, which suggests that the drugs or other materials used by the injection drug user were contaminated with soil or feces.² Aside from proximity in time, the common risk factor for all cases was subcutaneous or intramuscular injection rather than intravenous injection of heroin.

Public health authorities advised physicians to urgently report cases meeting the case definition and recommended that injection drug users with a serious inflammation seek medical attention rapidly. Injection drug users were cautioned to smoke rather than inject heroin; if they did inject, they were advised to avoid injecting into muscle or tissue outside a vein.

To better define the size of the population at risk in our city, we surveyed 153 injection drug users attending Montreal needle exchange programs about their injection practices. No one reported intentional subcutaneous (skin popping) or intramuscular (muscle popping) injections. However, 72 (47.1%) reported unplanned injections; of 17 554 injections in the previous month, 2308 (13.1%) were subcutaneous and 667 (3.8%) were intramuscular as a result of injection error. There was a significant association between these unintended injections and higher age ($p = 0.01$) and female sex ($p = 0.02$).