

Nouvelles et analyses

Is a minority government in the offing? Might it be good for health care?

Politicians watch all opinion polls closely, but they are watching the ones being conducted for this federal election campaign like hawks. The reason is simple: today's polls carry more weight than they did in the last 2 elections because the Liberals finally face some serious competition. "A minority Liberal government is quite possible," says David Cameron, a professor of political science at the University of Toronto. "The Liberals have not offered voters a powerful reason to keep them in office. They were close to a minority last time, and the likelihood that they can get a better result in their third election than they did in their second, without changing leaders and facing the new Canadian Alliance Party, is low."

If Jean Chrétien's party doesn't win a bare minimum of 151 seats in the House of Commons, Canada will have its first minority government since Joe Clark's short-lived turn in the sun in 1979. If we do get one in the next few months, it could have a huge impact on issues such as health care because minority governments make for strange bedfellows. Even a small, left-leaning party like the NDP holds enormous potential power if it is called on to prop up the Liberals.

So how would a minority govern-

ment operate? Federally, minority governments traditionally rely on opportunism. From 1957 to 1979, both Liberal and Tory minority governments — there were 6 of them — recruited allies as they needed them, issue by issue. Each minority government bounced back and forth between the opposition parties, according to which issue they could dangle in front of which potential ally. This is likely the way a Liberal minority government would operate today.

Cameron says it might be forced to generate political energy that is missing from the current government. "If a government is running for its life, it is likely to be more creative in policy terms than the stand-pat, don't-rock-the-boat majority government we have watched for the past few years. It will be acutely sensitive to both voters and potential partners."

But since the Canadian Alliance will have all the momentum and will be eager to bring down the government, the Liberals will seek support from the NDP, Bloc Québécois or Tories, all of which are now on the left of Chrétien's Liberals.

And why would they prop up the Liberals? "It is worth while for a third party to support a minority government if it can get its platform adopted," explains Cameron. "None of those parties

can hope to form a government themselves, nor would they get in bed with each other. But if they can claim a policy victory and keep the Alliance out of power at the same time, they will resist any pressure to defeat the Liberals."

Cameron anticipates that the dynamics of a minority government will strengthen the Canada Health Act. "The Alliance is seen as no friend of a publicly funded health care system, and the other 4 parties are committed to preserving medicare." Since the Liberals have made the preservation of medicare central to their platform, they will enlist NDP, Tory and Bloc support for new health care initiatives. They can then accuse the Alliance of trying to destroy Canada's favourite social program by recommending the erosion of federal authority.

What gives the Liberals the chills right now, though, is the prospect that Stockwell Day, the Alliance leader, might do a better job of building a coalition than Jean Chrétien. Day will be a real threat if he can convince undecided voters in Quebec that he is committed to decentralization and undecided voters in Ontario that the Alliance can grow beyond its Western roots. That's why his success last August in recruiting 2 former Bloc Québécois MPs as Alliance candidates in Quebec prompted an outburst of antiseparatist rhetoric from senior Liberals, who accused the Alliance leader of "sleeping with the enemy." (The next day the *National Post* pointed out that the Liberals had been actively wooing a couple of sitting Bloc MPs.)

The Liberals remain well ahead of the Alliance in the polls and, now that Day is in the House of Commons, they are confident that his vaunted "charisma" will not survive the verbal fisticuffs of Question Period.

But they may be wrong. If they are, and the Alliance continues to rise in the polls, Liberal strategists will have to start planning the tactics they will use to ensure the survival of the first federal minority government of the new century. — *Charlotte Gray, Ottawa*

Halifax says No to pesticides

With a strong show of hands at city hall — 17 to 6 — Halifax has become the first major city in Canada to ban the use of pesticides on residential lawns and gardens. Beginning next April, it will be illegal to use pesticides within 50 m of hospitals or schools. The full ban takes effect in 2003.

The city council vote capped 4 months of often rancorous public hearings and debate. Among the no-spray proponents was the Nova Scotia College of Family Physicians. Restricting pesticide use "is in the best interests of the health of our children," says Dr. Cathy MacLean, the president-elect. "My sense is that children are at risk with respect to exposure to pesticides because of their size." — *Donalee Moulton, Halifax*



BC families win suit over government payment for expensive autism therapy

The British Columbia Supreme Court says the province violated the Canadian Charter of Rights and Freedoms and discriminated against children with autism by refusing to pay for a controversial form of behaviour-modification therapy. The ruling came after families with autistic children filed a lawsuit. The province, home to 1300 autistic children, has filed an appeal.

About 150 BC families currently pay up to \$60 000 a year for the intensive, 40-hour-per-week therapy developed by Dr. Ivar Lovaas of the University of California. Its supporters claim the Lovaas method is the only effective, long-term treatment for autism; 63 BC psychiatrists endorsed the therapy by signing a petition, which was used to support the lawsuit. The BC government's refusal to fund the treatment led several BC families to move to Alberta, where it is publicly funded.

In her ruling, Justice Marion Allan said early intensive behavioural treatment is medically necessary. She rejected the government's argument that

it cannot afford the treatment, arguing that the costs "may well be offset by the saving achieved by assisting autistic children to develop their potential."

Autism, a complex neurological disorder characterized by excesses and deficits in speech, language, cognitive function and socialization skills, causes developmental delay that is evident to specialists by the time a child is 18 to 30 months old. Lovaas therapy is supposed to counter it with intensive training in pre-academic/academic skills, language, socialization and behavioural skills.

Dr. Sabreena Freeman, a sociologist who has an autistic child, says that with the therapy, basic skills are broken down and taught through repetition. In teaching colours to a pre-school-age autistic child, the therapist may place a red block on a table and ask the child to "give me red." If the child doesn't respond, the therapist would place his hand on the block and push it over. This process is repeated continuously.

Deborah Pugh of the Autism Society of BC calls the therapy "highly contro-

versial," since some supporters, desperate for help, started calling the treatment a cure. "For decades families were given very little hope, and [then] Lovaas gave us reason for hope," she explains.

Dr. Ken Bassett of the BC Office of Health Technology Assessment says he is concerned by the lack of detail in the original 1987 study that introduced Lovaas therapy and its 1993 follow-up. "In his program, Lovaas provides a detailed manual, but the extent to which it was actually followed in his own studies is unknown. You can't even tell whether what is going on now is similar to what went on in the original study."

About 10 BC families with autistic children have moved to Alberta, where government-funded Lovaas therapy is available. Scott McDonald's 2 autistic sons now receive 38 hours of Lovaas therapy weekly, and he pays only 3% of the cost. He said autism takes a huge toll on families. "A lot of the people we know [who have autistic children] are now single parents," he said. — *Heather Kent, Vancouver*

Ottawa U embraces "high-tech, high-touch" medical education

Medical students at the University of Ottawa (www.uottawa.ca) will be spending more time cracking their "notebooks" than their textbooks as they wend their way through the new U of O Web-based curriculum this year.

The new curriculum is called "meded" and is based on problem-based learning (PBL), but takes the concept a step further with the integration of Web-based images, test results and videos, all accessible through notebook computers supplied to each student.

"The real bonus of PBL is that it adds a much more detailed clinical perspective to the basic science of our learning," said second-year student Fawzi Mankal. "The computerized cases are excellent because we can see what a grand mal seizure actually looks

like, instead of having to rely on descriptions in a book."

The U of O still incorporates some traditional lecture-style teaching for its medical students, but organizes learning about the major body systems into 13 blocks. Training is further linked to a "problem of the week" patient case that is presented to students on a Monday and serves as the basis for the teaching for the rest of the week.

Professor Walter Hendelman hopes to expand the resources available online. He cites cooperation among Canadian medical schools as one of the best ways to achieve this growth. "Within the confines of our own country, we should be able to share resources across provincial boundaries because we are all basically drawing from the same trough."

Hendelman has collaborated with other physicians to develop neurological images for students. His most recent effort, developed with Ottawa neurologist Christopher Skinner, details syringomyelia and includes graphic images of the anatomy and pathophysiology of the spinal cord.

Dr. Peter Walker, the dean of medicine, sees computerized education as an important tool for the future of medical training, particularly in preparing physicians to practise in rural and underserved areas.

"Web-based learning means that you can take the student anywhere. Whether you are in Ottawa or Smooth Rock Falls, it doesn't matter. You are plugged in and you can be confident that they can access the information they need." — *Steven Wharry, CMAJ*

NEJM's new editor cut ties with 20 drug companies before taking helm

Last year Dr. Jerome Kassirer, the editor of the *New England Journal of Medicine*, was fired after he refused to relinquish some of the journal's autonomy to the publisher, the Massachusetts Medical Society. Now the journal has made another controversial decision by hiring an editor with a history of close ties to the drug industry.

When the appointment of Dr. Jeffrey Drazen was announced last spring, there was some criticism in the lay media because of his connections with drug companies. However, the former chief of pulmonary and critical care medicine at the Brigham and Women's Hospital in Boston says he spent the next 2 months breaking those connections by resigning from advisory positions and liquidating stocks and assets.

Drazen says he abides by the 188-year-old journal's conflict-of-interest standards. They require authors of scientific reports to disclose industry ties and disqualify those who are in a potential conflict-of-interest position because they have been paid by a drug company or own stock in a company.

Drazen, a leading asthma researcher who helped test 3 popular asthma medications, said in an interview that he had ties with about 20 drug companies, although "it was all preliminary research."

In accordance with *NEJM* policy, Drazen says he won't deal with any manuscripts involving these companies for 2 years from his last point of contact. He doesn't think that recusing himself from these manuscripts will impede his work as editor. "Only about 12% of papers at the *NEJM* concern drugs or drug products," said Drazen, 53, who became editor July 1.

Dr. Marcia Angell, interim editor for the past year, says recusing himself

could prove "a little bit awkward" for Drazen in the small, closely knit office, but she acknowledges that it was the "right thing to do."

Drazen had to overcome some bad PR in assuming the job. In March 1999, the Food and Drug Administration issued a "notice of violation" against a drug company, Sepracor Inc., because of "false or misleading" statements

Drazen made about the safety and efficacy of an expensive new asthma drug, levalbuterol; it is a variant of albuterol, but costs 5 to 8 times more. Drazen described it as "the first real advance in rescue asthma therapy in over 20 years."

Drazen, who was paid to serve as the company's expert spokesman during the drug launch, told *The Wall Street Journal*

that he was naïve to let that quotation stand, but he's unapologetic about his previous ties to industry. He maintains that academic researchers must work closely with drug companies if they are to remain conversant about new drugs as they come to market. The key, said Drazen, is that doctors running clinical trials involving drugs have no financial

interest in the outcome. The influence of pharmaceutical companies on research, however, has been demonstrated. For example, an evaluation of calcium-channel antagonists (see *N Engl J Med* 1998;338:101-6) showed that a variety of financial relationships between authors and drug companies resulted in bias in favour of particular companies' products. About 70% of funding for US clinical trials of drugs and devices now comes from industry, not government.

Kassirer, the *NEJM* editor for 8 years, was dismissed because he opposed plans by the Massachusetts Medical Society to use the journal's name and logo to promote unrelated products — commonly referred to as branding. It also wanted to move the journal offices from the Countway Library at Harvard University — the very hub of research — to the more remote and corporate environment of the society's new head office (see *CMAJ* 1999;161:529-30).

"I don't know how [the branding issue] will play out," says Angell. "Branding is very important for financial success, and the medical society cares very much about that."

But Drazen isn't debating branding — he's talking about his plans for the *NEJM*. "I have a wonderful legacy from my predecessors," he says. He wants to make the journal more useful by enhancing review articles and adding a "very focused" series on hospital-based practice. — *Barbara Sibbald, CMAJ*



Drazen: changes in store

CMAJ's impact factor improves

CMAJ's impact factor, the most important indicator of how widely its articles are cited in the scientific literature, rose significantly last year, the Institute for Scientific Information in Philadelphia reports. The data indicate that the journal's impact factor rose from 1.6 citations per scientific article in 1997 to 2.4 in 1999. At the same time, the number of citations for *CMAJ* articles rose to 4873 in 1999, up 18% from 1997. The numbers are important because they express the relation between the volume of substantive scientific articles published and the frequency with which the journal is cited. The result means that *CMAJ* now ranks fifth among the world's general medical journals. The only general-interest journals with higher impact factors are the *NEJM* (28.9), *JAMA* (11.4), *Lancet* (10.2) and the *BMJ* (5.1).

BC physicians help peacekeepers fight their demons

Family doctors and former peacekeepers are pooling their talents to provide a 15-week counselling program for Canadian soldiers experiencing post-traumatic stress disorder (PTSD).

About 100 former Canadian peacekeepers from British Columbia, most of whom served in the former Yugoslavia, will participate in the program, which was launched last month at UBC. Six specially trained family doctors and former peacekeepers who have completed a pilot program will provide the counselling.

Dr. Marvin Westwood of UBC's Department of Psychology says involving former peacekeepers in counselling is essential because soldiers more readily trust those with a military background. In a pilot project that preceded the counselling program, that credibility helped participating peacekeepers become "emotionally expressive, talking about what really happened."

During the pilot project, soldiers reenacted experiences such as being taken hostage. When it ended, 8 soldiers volunteered for additional training in order to help lead this fall's expanded project.

An estimated 40% of peacekeepers will be affected by some type of PTSD (see page 1187). Westwood says most soldiers with symptoms of the disorder — these include nightmares and depression — are in denial for up to a year. And unlike their counterparts from WW II, says Westwood, peace-

keepers experience additional trauma because their rules of engagement often prevent them from intervening to prevent slaughter, as was the case in Rwanda and Bosnia.



Scenes like this one, from Bosnia, have haunted many of Canada's peacekeepers.

Three groups of peacekeepers who completed the pilot program reported improvement in several areas, including family and work relationships and quality of sleep. The pilot project was supported by Veterans Affairs Canada, but the \$150 000 cost of the expanded counselling program is being paid by the Royal Canadian Legion. "It was evident to us that these peacekeepers had endured some pretty horrendous

things and needed assistance when they came home," says Linda Sawyer, executive director of the Legion's Pacific Command.

Physicians participating in the program are trained to recognize trauma-related symptoms. Westwood says the physician participation is important because "they are the frontline people that returning peacekeepers will eventually turn to. And we also wanted to raise the consciousness of physicians regarding combat-related trauma."

Soldiers tend to under-report psychological symptoms to military physicians because they worry such reports will damage their careers. "They tell us outright that they would never tell a military doctor, ever, that they had any psychological symptoms," says Westwood, because those doctors would be obliged to report that information.

Dr. David Kuhl, an expert in resolving psychological trauma and a project participant, says it has already been determined that WW II veterans sometimes suppressed traumatic memories for 50 years. He says today's peacekeepers appear "to be following the same pathway. We need to be aware of how some of these psychological features could translate into illness experiences."

The peacekeepers will be followed for 2 years after the counselling concludes. Eventually, Westwood hopes to expand the program nationally. — *Heather Kent, Vancouver*

Family physicians providing fewer specialist services

The number of general practitioners and family physicians providing specialist services continues to decline, the CMA's 2000 Physician Resource Questionnaire (PRQ) indicates. In 2000, 18.3% of all GP/FPs performed emergency room duties, compared with 30.2% in 1990. The proportion of GP/FPs doing surgery or surgical assisting has also decreased in the last decade, from 31.3% to 19.8%.

As well, the proportion of GP/FPs handling deliveries has declined steadily in the last decade, from 28.6% in 1990 to 18.1% in 2000. This phenomenon may be explained in part by low fees. "Now that midwives have become registered and are paid significantly more than we are," wrote one family physician, "morale is terrible among those of us remaining."

For the GP/FPs who still perform

deliveries, workload has increased 29% in the last decade, with the average annual number of deliveries performed in the past year rising from 32 in 1990 to 41 in 2000.

The 2000 PRQ was mailed to a random sample of 8000 Canadian physicians, and the response rate was 36.3%. Results are considered accurate to within $\pm 1.9\%$, 19 times out of 20. — *Shelley Martin, CMAJ*

On the Net

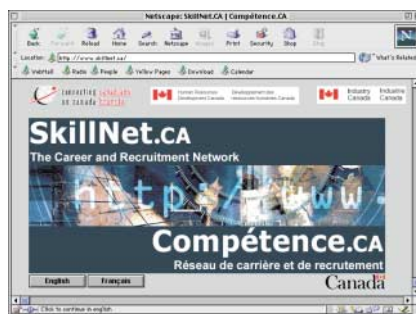
Letting your fingers do the walking to a new job

Unhappy with your current position? Looking for a career change? Your move to a new job may be only a mouse click away.

For physicians, some of the most interesting developments in online job searching are taking place at the CMA's own site, where classified advertising from *CMAJ* has proved a popular addition since its introduction 6 months ago (www.cma.ca/careers/index.htm). Advertisements are listed under 10 different headings, which are then subdivided — the Positions Vacant section offers 14 subclassifications for individual specialties. The classified ads from the Sept. 19 issue of *CMAJ* contained 38 vacant positions for family physicians; visitors can respond to many of them with a mouse click.

Another major change will take place early next year, when CMA Careers (www.cmacareers.com) is launched as part of Industry Canada's massive SkillNet site (www.skillnet.ca). Karen

McKenzie, program manager for CMA Careers, says the new site will provide a career-matching service that will allow physicians and other health care professionals to post their resumé online. This will allow them to match their



qualifications to a range of medical opportunities across Canada. As well, employers will be able to post vacant positions and manage large recruitment campaigns. "The idea is to bring both sides of the career-matching equation together in one place," she said. (CMA

members will be able to register and search the site for free; there will be a charge for nonmembers.)

SkillNet has already attracted similar participation from the nursing, teaching and other professions. McKenzie said the CMA is particularly eager to attract health care professionals to the site as they launch their careers.

If you're interested in a job in biomedical research, consider visiting www.sciencejobs.com. Developed by the publishers of *New Scientist* (www.newscientist.com) and the research Web site *Biomednet* (www.bmm.com), this new service is an electronic career board that lets employers post job openings.

Although the focus is American, there are postings from Canada, Europe, Australia and New Zealand. There is also a service that lets scientists receive email notifications of postings in their area of interest. — *Michael O'Reilly, mike@oreilly.net*

BC doctor seeks class-action suit over payment for uninsured patients

An emergency physician who used to practise in British Columbia is suing the provincial government for nonpayment of services he provided to uninsured patients. Dr. James Halvorson has also applied to have his case certified as a class-action suit, which has the potential to involve many more of the province's doctors. A decision is expected soon.

Halvorson's lawyer, Sandy Kovacs, says the lawsuit requests that the case date to 1984, when the Canada Health Act was enacted. Kovacs estimates BC physicians have lost \$140 million since then because they weren't paid for providing care to uninsured patients. Before 1996, medical insurance for BC residents was cancelled if premiums were in arrears for more than 3 months; physicians lost about \$10 million a year because of nonpaid treatment provided

to these deinsured patients. After 1996, changes were made to cover people for up to a year after they fell into arrears. Kovacs estimates that about \$5 million a year is owing to physicians for uninsured services provided since then. BC and Alberta are the only provinces charging medical insurance premiums. In BC, premiums cost \$64 monthly for families with 2 children.

About 40 000 of BC's 4 million residents are currently unregistered. Nonpayment of premiums doesn't limit a person's health coverage "in any way," says Jeff Gaulin, a government spokesperson. The government tries to trace unregistered people; if there is no contact for a year, they are assumed to have left the province.

Emergency physicians are affected most. At St. Paul's Hospital in down-

town Vancouver, which serves many homeless people who have no insurance, emergency doctors opted for a service contract 10 years ago to cover uninsured patients' billings.

Dr. Jane Goundrey, head anesthetist at the Peace Arch Hospital in White Rock, says the problem of uncompensated, on-call work is "infrequent but annoying." These patients often arrive with nonemergency complaints during evenings or weekends, she said. Recently, surgery was delayed for a patient with a fractured ankle after doctors discovered that his medical insurance had lapsed. Goundrey defends the action: "There was at least a 3-day period in which the surgery could be performed safely, so there was plenty of time for the patient to apply for benefits." — *Heather Kent, Vancouver*

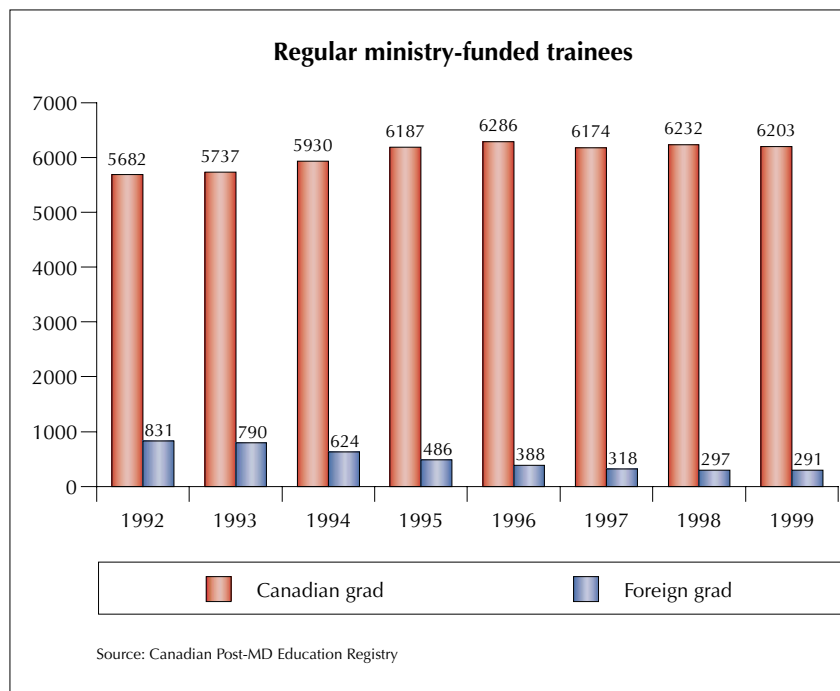
Pulse

Trainees sponsored by foreign governments fill growing share of residency slots

Most postgraduate training positions in Canada are funded by provincial ministries of health. Although graduates of Canadian medical schools fill most of these, some spots are taken by graduates of foreign schools who are permanent residents of Canada.

Visa trainees from other countries are also accepted into Canada's postgraduate training programs, but they are usually funded by their home

6674 to 6494, a 3% decline. The downward pressure on the government-funded positions has led to fewer opportunities for graduates of foreign medical schools who are permanent residents of Canada. The number of Canadian medical graduates in training dropped by 1% between 1996 and 1999, while the number of trainees who were graduates of foreign medical schools and also permanent residents of



country. Most of these physicians return home after completing their training. The latest census of residents in training found that the number of visa trainees funded by their home country — Saudi Arabia is an example — has increased by almost 50% in the last 5 years, from 435 in 1994 to 646 in 1999.

Meanwhile, between 1996 and 1999 the number of trainees funded by governments in Canada decreased from

Canada decreased by 25%. The size of the latter group has declined steadily, from 831 in 1992 to 291 in 1999.

Since the fall of 1999, provincial governments have increased the number of funded postgraduate entry positions by 74, a change that took effect this year. They will add another 40 positions in 2001–2. In Ontario, 12 of the new positions have been allocated to the international medical graduate program. — *Lynda Buske*, buskel@cma.ca

Fellowship targets women with family responsibilities

A new fellowship designed to make research opportunities more attractive to women with family responsibilities has been launched by the Toronto-based Centre for Addiction and Mental Health. Funded by a \$450 000 grant from Eli Lilly Canada, the fellowship was created “to meet the needs of women investigators who are combining family responsibilities and careers, since the majority of existing fellowships do not offer this type of flexibility.”

The first winner is Dr. Pier Bryden, who is investigating anorexia nervosa and bulimia in young girls. Bryden says the fellowship she received is “unique in its acknowledgement of the challenges encountered by female professionals attempting to juggle clinical, research, financial and familial obligations. It has allowed me to pursue my research and clinical work part time and have a family.”

The deadline to apply for next year's fellowship is Feb. 1, 2001. For information, call 416 535-8501, x4683.

MRI machine to hit the road in northern NB

What do you do when you can't afford to put 3 MRI machines in northeastern New Brunswick? Simple. You get one machine and ferry it between 3 different sites. Under the plan, 3 regional hospital corporations will pay \$250 000 each to construct temporary docking stations for the machine, while the province will pay annual operating and transportation costs of \$875 000. A mobile MRI was already travelling between Moncton and Saint John. Because those cities are now installing fixed MRI machines, the mobile one will be transferred to northeastern New Brunswick, with service expected to start early in 2001.

Clinical Update

A new option in oral hypoglycemic therapy for type 2 diabetes mellitus

Fonseca V, Rosenstock J, Patwardhan R, Salzman A. Effect of metformin and rosiglitazone combination therapy in patients with type 2 diabetes mellitus: a randomized controlled trial. *JAMA* 2000;283:1695-702.

Background

Many patients with type 2 diabetes mellitus require treatment with more than one oral hypoglycemic agent to achieve optimal glycemic control.¹ Traditionally, physicians have combined metformin, which enhances glucose uptake in peripheral tissues and reduces hepatic gluconeogenesis, with a sulfonylurea drug, which stimulates insulin secretion. Because insulin resistance frequently contributes to hyperglycemia in patients with type 2 diabetes, the combination of metformin and a drug that reduces insulin resistance presents a rational alternative to conventional dual oral hypoglycemic therapy. Rosiglitazone, a newly available member of the thiazolidinedione family of oral hypoglycemic agents, is an example of this type of drug.²

Question

Is combination therapy with rosiglitazone and metformin as effective as or more effective than metformin therapy alone in achieving glycemic control in patients with type 2 diabetes?

Design

In this double-blind clinical trial,³ 348 patients in 36 US outpatient sites were randomly assigned to 1 of 3 treatment groups: metformin plus placebo ($n = 116$), metformin plus rosiglitazone 4 mg/d ($n = 119$) or metformin plus rosiglitazone 8 mg/d ($n = 113$). In all patients the dosage of metformin was titrated to the desired maximum of 2.5 g/d during a prerandomization run-in phase. Efficacy was assessed after 26

weeks of treatment by comparing changes from baseline in the levels of fasting plasma glucose and glycosylated hemoglobin (HgbA_{1c}) and in indirect measures of insulin sensitivity and pancreatic β -cell function. Safety was assessed by monitoring adverse events, lipid profile and liver enzyme levels.

Results

The subjects were between 40 and 80 years of age and had had diabetes for 7.7 years on average. They were free of clinically significant hepatic or renal disease, symptomatic coronary artery disease and peripheral neuropathy. Baseline characteristics of the 3 treatment groups were comparable, with mean values for fasting plasma glucose, HgbA_{1c} and body mass index of 12 mmol/L, 8.8% and 30.1 respectively.

After 26 weeks the HgbA_{1c} concentration was significantly lower in each of the metformin-rosiglitazone treatment groups than in the metformin-placebo control group, by 1.0% in the group receiving 4 mg/d of rosiglitazone and 1.2% in the group receiving 8 mg/d ($p < 0.001$). The mean fasting plasma glucose levels were also significantly lower in the rosiglitazone groups than in the control group, by 2.2 mmol/L in the group given 4 mg/d of rosiglitazone and 2.9 mmol/L in the group given 8 mg/d ($p < 0.001$). Measures of insulin resistance and beta-cell function showed improvement in the rosiglitazone groups but not in the control group.

Rates of adverse events, including symptomatic hypoglycemia, were comparable in the 3 groups. No elevation of serum transaminase levels beyond 3 times the upper limit of normal was observed. Compared with the control subjects, those in the 2 rosiglitazone groups demonstrated modest but statistically significant increases in serum cholesterol levels (mean change from baseline low-density lipoprotein chol-

esterol of 0.46 mmol/L among subjects receiving 4 mg/d and 0.53 mmol/L among those receiving 8 mg/d, $p < 0.001$).

Commentary

This study demonstrates that, in patients with type 2 diabetes, combination therapy with metformin and rosiglitazone achieves significantly better glycemic control than metformin alone. The trial was not designed to assess whether rosiglitazone is superior to insulin or a sulfonylurea drug when combined with metformin. As well, because of the relatively short period of observation, the long-term impact of combination therapy on the progression of diabetes and on the incidence of end-organ complications is unknown.

Practice implications

The addition of rosiglitazone to maximum-dose metformin is safe and effective in improving glycemic control in patients with type 2 diabetes. Increasing the dosage of rosiglitazone from 4 to 8 mg/d appears to offer only modest additional benefit. Patients treated with this combination therapy demonstrate an increase in serum cholesterol and should undergo close lipid-profile monitoring. — Donald Farquhar

The Clinical Update section is edited by Dr. Donald Farquhar, head of the Division of Internal Medicine, Queen's University, Kingston, Ont. The updates are written by members of the division.

References

1. Turner RC, Cull C, Frighi V, Holman R, for the UK Prospective Diabetes Study (UKPDS) Group. Glycemic control with diet, sulfonylurea, metformin, or insulin in patients with type 2 diabetes mellitus. *JAMA* 1999;281:2005-12.
2. Saltiel A, Olefsky J. Thiazolidinediones in the treatment of insulin resistance and type 2 diabetes. *Diabetes* 1996;45:1661-9.
3. Fonseca V, Rosenstock J, Patwardhan R, Salzman A. Effect of metformin and rosiglitazone combination therapy in patients with type 2 diabetes mellitus: a randomized controlled trial. *JAMA* 2000;283:1695-702.

Public Health

Veterans and post-traumatic stress disorder

Epidemiology

Many of Canada's nearly 500 000 surviving World War II veterans will be participating in Remembrance Day ceremonies next month. However, some will be too ill or feeble to attend, while others will simply try to forget their wartime experiences by staying away from the triggers that reactivate memories they want to avoid.¹ A smaller number of young soldiers who have seen more recent conflicts, this time in the difficult role of peacekeeper, will also be present (see page 1183).

It is normal to want to avoid painful memories, but if the avoidance is accompanied by hyperarousal, flashbacks, nightmares and a restricted range of emotions, the syndrome of post-traumatic stress disorder (PTSD) may be present.²

The diagnosis of PTSD was not formalized until 1980. Earlier terms used to describe the chronic psychiatric casualties of war included "shell shock," "traumatic war neurosis" and "combat exhaustion." We are coming to understand PTSD as a long-term reaction to war-zone exposure that may linger, reactivate or even present as late as 50 years after exposure.³⁻⁵ Such factors as physical ill health, retirement, loneliness, anniversaries, service reunions and the use of psychotropic medications increase the risk of reactivation.⁴

Estimates of the current prevalence of PTSD among World War II veterans range from 9% among those who have never sought psychiatric help⁶ to 27% among those who had been treated in a psychiatric hospital⁶ to 43%–59% among veterans who were prisoners of war.^{5,6} Current estimates indicate that up to 40% of Canada's returning peacekeepers will experience some form of PTSD (page 1183).

Clinical management

Patients with PTSD tend to avoid talking about it, so unless physicians delib-

erately take a military and trauma history, the diagnosis is likely to be missed. The most widely used diagnostic instrument is the CAPS (clinician-administered PTSD scale), but it is complex and takes 45 minutes to complete.² Shorter screening scales are being developed,⁷ but their validity and reliability when applied to veterans, whose symptom complex is often muddled by comorbid depression⁸ and physical illness,⁹ has yet to be established.

Few treatments of PTSD have been rigorously evaluated,⁶ although well-controlled studies of the clinical efficacy of drugs are reportedly under way.² According to the International Consensus Group of Depression and Anxiety,² there are 3 aspects to the acute management of PTSD: education of the patient about the disorder and the normal stress response, psychological support and psychopharmacologic treatment. If at 3 weeks after exposure to the traumatic event there is no clinical improvement in the patient's stress response, then referral to a mental health specialist or initiation of cognitive behavioural and drug therapy, or both, is indicated. The consensus group recommends the use of selective serotonin re-uptake inhibitors as first-line treatment, based on data from well-controlled studies.

Data on the risk of reactivation and the appropriate long-term follow-up of patients are lacking and have been identified by the consensus group as outstanding research questions. In the absence of data, experts agree that veterans have unique issues that are best ameliorated through peer counselling and active engagement in family and community.⁶

Prevention

In a recent Cochrane review,¹⁰ single-session individual debriefing was not found to reduce psychological distress or prevent the onset of PTSD. Those who received the intervention showed no significant short-term (3–5 months)

reduction in the risk of PTSD (pooled odds ratio 1.0, 95% confidence interval [CI] 0.6–1.8), and at 1-year follow-up one study showed that there was a significantly increased risk of PTSD among those receiving debriefing (odds ratios 2.9, 95% CI 1.1–7.5).

It sounds trite to suggest that the best primary prevention of war-related PTSD is the prevention of war itself. Many physicians see such work as beyond their purview, but the exceptional few, such as those who have fought to reduce the use of land mines and nuclear arsenals¹¹ and who have been honoured with Nobel Peace prizes for their vision and efforts, do not. Our thoughts extend to the veterans and casualties of war on Nov. 11, lest we forget what they cannot. — *Erica Weir, CMAJ*

References

1. Krasucki C, Bandyopadhyay D, Hooper E. Post World War II stress syndrome [letter]. *Lancet* 1995;345:1240.
2. Ballenger J, Davidson J, Lecrubier Y, Nutt D. Consensus statement on posttraumatic stress disorder from the International Consensus Group on Depression and Anxiety. *J Clin Psychiatry* 2000;61:60–6.
3. Herrmann N, Eryavec G. Delayed onset post-traumatic stress disorder in World War II veterans. *Can J Psychiatry* 1994;39:439–41.
4. Macleod AD. The reactivation of post-traumatic stress disorder in later life. *Aust NZ J Psychiatry* 1994;28:625–34.
5. Beal AL. Post-traumatic stress disorder in prisoners of war and combat veterans of the Dieppe raid: a 50-year follow-up. *Can J Psychiatry* 1995;40:177–84.
6. Friedman M, Schnurr P, McDonagh-Coyle A. Post-traumatic stress disorder in the military veteran. *Psychiatr Clin North Am* 1994;17:265–77.
7. Breslau N, Peterson E, Kessler R, Schultz R. Short screening scale for DSM-IV posttraumatic stress disorder. *Am J Psychiatry* 1999;156:908–11.
8. Hyer L, Stanger E, Bouodewyns P. The interaction of posttraumatic stress disorder and depression among older combat veterans. *J Clin Psychol* 1999;55:1073–83.
9. Wagner A, Wolfe J, Rotnitsky A, Procter S, Erickson D. An investigation of the impact of post-traumatic stress disorder on physical health. *J Trauma Stress* 2000;13:41–55.
10. Wessley S, Rose S, Bisson J. Brief psychological interventions ("debriefing") for trauma-related symptoms and the prevention of posttraumatic stress disorder [Cochrane review]. In: *The Cochrane Library*; Issue 3, 2000. Oxford: Update Software.
11. Audio interview with Dr. James Orbinski, Médecins sans Frontières/Doctors Without Borders. Available: www.cma.ca/cmaj/audio/orbinski_0200.htm