Delays in cancer diagnosis loom, lab medicine specialists warn

The shortage of laboratory medicine specialists is becoming so severe Canadians will soon witness delays in the diagnosis of cancer and other diseases, the Canadian Association of Pathologists (CAP) warns.

Dr. Murray Treloar, a general pathologist from Oshawa, Ont., who chairs CAP's Professional Affairs Committee, says the number of laboratory medicine specialists has declined by almost 10% in the past 10 years and job openings are at an all-time high. "The situation is very serious. Twenty-five percent of Canadian pathologists are going to retire in the next 10 years, and delays in treatment and cancer diagnosis are on the horizon."

Laboratory medicine, which covers 6 specialties ranging from anatomical pathology to medical microbiology, employs 1089 full-time physicians today, down from 1203 in 1993. Treloar says that even though numbers have remained relatively steady for the past 5 years, "the discrepancy between the number of old and young [physicians] is obviously a very major problem, and it is unlike the population distribution in other specialties and family medicine. The situation is much worse than it was in 1993."

Only 10% of today's laboratory medicine specialists are in the 30-to-39 age group, while the proportion in the preretirement category, 50 to 59 years, is approaching 35%. Laboratory medicine remains a distinctly unpopular career choice among Canada's medical students. Of the 1117 students who entered this year's residency match, not 1 made general pathology a first choice, while only 2 chose anatomical pathology.

The recruiting problem is already being reflected by the highest number of job vacancies in recent memory. In the second quarter of 2001, journals like *CMAJ* carried 31 ads for full-time laboratory physicians, compared with only 5 during the same period in 1997. "They keep advertising the same jobs, but they're not being filled," Treloar says.

He described the situation in Thunder Bay, Ont., as a "revolving door," and said that even the University Health Network in Toronto is having trouble finding anatomical pathologists. "That is unheard of," says Treloar.

These issues are familiar to Dr. Ian

White of Winnipeg, past president of the Canadian Anesthesiologists' Society. As late as 1998, 25% of residency slots in anesthesia were going unfilled. In 2002, only 1 of 61 positions went unfilled.

He said the society spent more than \$100 000 looking into human resource and recruiting issues and discovered that anesthesia's most serious problem was its image. "We tended to be quite isolated from other physicians and we never communicated. We then took a specific direction and tried to get out more and meet medical students."

He thinks laboratory medicine specialists have to take a hard look at the image they project. "Of the 70 to 80 students I've worked with over the past 10 years, only 1 indicated an interest in pathology. It's a very rapidly aging, male-dominated specialty at a time when 50% to 60% of

new doctors are women — that's where the image problem comes in."

Treloar says laboratory medicine needs "a concerted effort at the provincial and national level if we are going to turn this around."

The same can be said for other specialties. Eleven of 49 positions in obstetrics/gynecology went unfilled in the first round of the 2002 residency match, and Dr. Donna Fedorkow, president of the Society of Obstetricians and Gynaecologists of Canada says Canada currently faces an annual shortfall of 45 ob/gyns.

And even though all 64 positions in pediatrics were filled in 2002, the Canadian Paediatric Society says 40% of practising pediatricians plan to retire by 2010 and not enough replacements are being trained. "A crisis is looming," the society says. — *Patrick Sullivan*, CMAJ

Controversial deferiprone gets a boost

The reputation of deferiprone, the controversial drug at the heart of one of Canada's bitterest academic rows (see *CMAJ* 2002;166[4]:452-3), has been buoyed by 2 new studies.

Deferiprone is an orally active iron chelator used to treat patients with thalassemia major. The drug, which is given orally, is better tolerated than deferoxamine, which must be given 5 to 7 days per week by prolonged subcutaneous infusion.

In 1998, Toronto researcher Nancy Olivieri and colleagues (*N Engl J Med* 1998;339:417-23) concluded that the drug may worsen the hepatic fibrosis that is typical of the iron-overloaded state endured by these children. The study involved 14 patients.

One of the new studies, by Ian Wanless and colleagues, involved an analysis of the largest collection of liver biopsies (112) from patients receiving deferiprone. It concluded that patients taking it show "no evidence of deferiprone-induced progression of hepatic fibrosis during long-term therapy." The study was prepublished online (*Blood* 2002;100:1566-9). The authors write: "The differing conclusion of Olivieri et al may be related to the small number of patients [14] in their study and to the difficulties of grading fibrosis in the small biopsies."

The second study, by Lisa Anderson and associates (*Lancet* 2002;360:516-20), involved a comparison of myocardial iron content and cardiac function in 15 patients receiving long-term deferiprone therapy and 30 matched controls receiving long-term treatment with deferoxamine. The authors report that deferiprone was more effective than deferoxamine in removing iron from the heart — an important finding because heart failure is the most frequent cause of death among thalassemia patients — but less effective than deferoxamine in removing iron from the liver.

In an accompanying commentary in *The Lancet*, Des Richardson notes that it may be time to try a combination of the 2 drugs and that it is time for a randomized clinical trial. — *CMA7*