We need to guard against pressures that could cause a return to the administratively and philosophically challenged processes that resulted in the demise of the Red Cross blood program — and a lot of Canadians. If we do not, the worst thing about the Canadian health care system could be that we deserve it.

G.F.O. Tyers

Division of Cardiovascular Surgery University of British Columbia Vancouver, BC

References

- Sibbald B. Detecting hepC for \$1.5 million a case. CMA7 2000;162(1):93.
- Campbell M. Anger over aid to Canadian NHL teams hypocritical. Vancouver Sun 2000 Jan 2 Sect D:1

TB among aboriginal Canadians

he review by Mark FitzGerald $oldsymbol{1}$ and coworkers on the control of tuberculosis in aboriginal Canadians¹ would have been improved by a brief reference to the history of the disease among these first Canadians. Tuberculosis was recognized in aboriginal North Americans in the pre-Columbian period but only became a major problem in the latter part of the 19th century, after we and the Americans had destroyed their livelihood, impoverished them and crowded them together on reservations or in prison (as we still do).2 Ferguson reported a mortality rate of 9000 per 100 000 in 1886, which is the highest rate ever recorded.3 For treatment we sent aboriginal people to fill the beds of sanatoria in southern Canada, where many died. When their families came to see what had happened to them, even their graves couldn't be located.

In view of the increased incidence of tuberculosis in aboriginal populations, it is natural to consider preventive methods. Bacillus Calmette–Guérin vaccine has been administered to more than 3 billion people, but there remains considerable doubt that it accomplishes anything. In controlled studies the pro-

tective efficacy varies from 57% to more than 75%, and it is not clear that averaging such disparate results by meta-analysis is of any significance.4 The efficacy is not, as the authors state, proven, and there is no reason to continue its wide use in aboriginal infants in contrast to the practice in the white population. Isoniazid prophylaxis in infected individuals is undoubtedly effective, but there has to be considerable caution in administering it to a population in which alcoholism and viral hepatitis are problems. The incidence of hepatotoxicity may be small, but the results can be catastrophic.5,6 A better alternative to isoniazid might be a combination of rifampin and levofloxacin, with a minimal risk of hepatitis.

The authors worry, perhaps patronizingly, about the risks of "health transfer" — allowing aboriginal people to take over responsibility for their own health needs. Our record, at least where tuberculosis is concerned, is dismal. The best solution would be to facilitate the transfer process and provide aboriginal people with their own clinics, nurses and doctors.

Leo M. Kahana

Department of Medicine McMaster University Toronto, Ont.

References

- FitzGerald JM, Wang L, Elwood RK. Tuberculosis: 13. Control of the disease among aboriginal people in Canada. CMAJ 2000;162(3):351-5.
- Daniel TM, Bates JH, Downes KA. History of tuberculosis. In: Bloom BR, editor. *Tuberculosis:* pathogenesis, protection, and control. Washington: ASM Press; 1994. p. 13-24.
- 3. Ferguson RG. Studies in tuberculosis. Toronto: University of Toronto Press; 1955. p. 6.
- Bloom BR, Fine PEM. The BCG experience: implications for future vaccines against tuberculosis. In: Bloom BR, editor. *Tuberculosis: pathogenesis, protection, and controls.* Washington: ASM Press; 1994. p. 531-57.
- Kahana LM. Hepatotoxicity of antituberculosis drugs [letter]. Thorax 1996;51:873.
- Mitchell L, Wendon J, Fitt S, Williams R. Antituberculous therapy and acute liver failure. *Lancet* 1995;345:555-6.

[The authors respond:]

We appreciate Leo Kahana's interest in our article on tuberculosis in aboriginal people in Canada. He raises a number of important issues.

We did not address the history of tuberculosis in Canada, as this subject had already been adequately covered by an earlier article in the CMA7 series on tuberculosis.2 We indicated that the role of bacillus Calmette-Guérin vaccination in tuberculosis control is controversial. Kahana quotes reports showing a wide range of efficacy, but efficacy within Canada, which is most pertinent to our review, shows a significant benefit in case-controlled studies.3 Many studies have shown underutilization of isoniazid chemoprophylaxis to be detrimental to tuberculosis control programs. The article by Mitchell and colleagues that Kahana cites refers to patients on active treatment;4 one of us (J.M.F.) responded to this report with suggestions about a nonhepatoxic regimen.5 There are no data on the combined use of rifampin and levofloxacin for chemoprophylaxis. Apart from toxicity, use of an expensive quinolone would incur significant additional costs. We are currently collaborating with the Tuberculosis Clinical Trials Consortium of the Centers for Disease Control and Prevention in Atlanta to develop a protocol to assess the efficacy of short-course chemoprophylaxis in non-HIV-infected people, which we hope will provide an alternative short-course regimen.

We disagree with Kahana's suggestion that we were patronizing in the section on health transfer. We welcome the concept of health transfer but caution that a public health surveillance system must remain in place. Our final conclusion was that tuberculosis control among aboriginal people must be "achieved in a culturally sensitive manner with a greater degree of community partnership that has been seen in the past." With this in mind, we are currently collaborating with the Institute of Health Promotion at the University of British Columbia to develop a community-based trainer program to involve First Nations people in planning and implementing community-driven and community-based chemoprophylaxis programs. By involving community members as well as health care professionals, it is hoped that we will be able to achieve the aspiration that we all share: to reduce the unacceptable burden of tuberculosis among aboriginal people in Canada.

J. Mark FitzGerald Lei Wang R. Kevin Elwood BC Centre for Disease Control Vancouver, BC

References

- FitzGerald JM, Wang L, Elwood RK. Tuberculosis: 13. Control of the disease among aboriginal people in Canada. CMAJ 2000;162(3):351-5.
- Grzybowski S, Allen EA. Tuberculosis: 2. History of disease in Canada. CMAJ 1999; 160(7):1025-8.
- Young TK, Hershfield ES. A case-control study to evaluate the effectiveness of a mass neonatal BCG vaccination among Canadian Indians. Am 7 Public Health 1981;76:783-6.
- Mitchell L, Wendon J, Fitt S, Williams R. Antituberculous therapy and acute liver failure. *Lancet* 1995;345:555-6.
- FitzGerald JM. Anti-tuberculosis therapy and acute liver failure [letter]. Lancet 1995;345:1172.

Treating TB in the 1950s

CMAJ's recent review of tuberculosis¹⁻¹³ made me recall the way we used to treat tubercular meningitis, a particularly ugly illness in children. Before 1950, no children survived this dreadful disease — 3 weeks from onset and it was all over.



Fig. 1: The Alexandra Hospital in Montreal provided treatment for children with tuberculosis in the 1950s.

In 1950, I attended a lecture in Boston given by Dr. Honor Smith of Oxford University. Working with neurosurgeon Sir Hugh Cairns, he had treated children with tubercular meningitis successfully using a combination of purified protein derivative of the tubercle bacillus (PPD) and streptomycin, both intrathecally and intramuscularly.

While a resident in Boston, I had seen a number of children die because of tubercular meningitis. When I returned to Montreal later that year, my proposal to treat children who had tubercular meningitis with PPD for my "investigative year" in preparation for Royal College fellowship was accepted. By the end of 1951, 11 children had been treated, 9 of whom survived. The result was unprecedented, and this was probably the first group of children to have survived the disease in Canada or the United States.

This clinical effort took place at the Alexandra Hospital in Montreal (Fig. 1). Over the next 4 years, 100 children were treated, and 80% survived. During this time, 50 McGill interns provided devoted and enthusiastic care to these children.

The successful treatment had 2 results. First, the federal government made a substantial grant to the operation of the unit. Second, Dr. Jonathan Meakins, Sr., then professor of medicine at McGill, invited Quebec Premier Maurice Duplessis to visit the unit. After a sumptuous lunch in the dining room of the Alexandra Hospital — all lunches at the Alexandra were sumptuous and formal, with Dr. E.M. Worden carving — Meakins presented the premier with a 1-page report on the state of tuberculosis in Quebec; he compared it with the situation in Warsaw after WW II. Duplessis was shocked and deeply moved by the report, and the result was the immediate construction throughout Quebec of many hospitals to treat tuberculosis. Their wonderful impact is now history.

Granville Nickerson

Pediatrician (retired) Cobourg, Ont.

References

- Fanning A. Tuberculosis: 1. Introduction. CMA7 1999;160(6):837-9.
- Grzybowski S, Allen EA. Tuberculosis: 2. History of the disease in Canada. CMAJ 1999; 160(7):1025-8.
- Long R, Njoo H, Hershfield E. Tuberculosis: 3. Epidemiology of the disease in Canada. CMAJ 1999;160(8):1185-90.

- Long R, Cowie R. Tuberculosis: 4. Pulmonary disease. CMA7 1999;160(9):1344-5.
- Nobert E, Chernick V. Tuberculosis: 5. Pediatric disease. CMAJ 1999;160(10):1479-82.
- Fanning A. Tuberculosis: 6. Extrapulmonary disease. CMA7 1999;160(11):1597-603.
- Laszlo A. Tuberculosis: 7. Laboratory aspects of diagnosis. CMA7 1999;160(12):1725-9.
- FitzGerald JM, Houston S. Tuberculosis: 8. The disease in association with HIV infection. CMAJ 1999;161(1):47-51.
- Hershfield E. Tuberculosis: 9. Treatment. CMA7 1999;161(4):405-11.
- Menzies D, Tannenbaum TN, FitzGerald JM. Tuberculosis: 10. Prevention. CMAJ 1999;161 (6):717-24.
- Schwartzman K, Menzies D. Tuberculosis: 11. Nosocomial disease. CMA7 1999;161(10):1271-7.
- Enarson DA. Tuberculosis: 12. Global disease and the role of international collaboration. CMA7 2000;162(1):57-61.
- FitzGerald JM, Wang L, Elwood RK. Tuberculosis: 13. Control of the disease among aboriginal people in Canada. CMA7 2000;162(3):351-5.

Corrections to the *Compendium* of *Pharmaceuticals and Specialties,* 35th edition, 2000

This is to inform you of 2 corrections in the product recognition section of the 35th edition of the Compendium of Pharmaceuticals and Specialties (CPS). On page R22, the photographs for Merck Frosst Canada & Co. products Singulair (montelukast sodium) 5 mg and Singulair (montelukast sodium) 10 mg were inverted. For further information, please refer to the product monograph for Singulair (montelukast sodium) on page 1464 of the CPS.

On page R10, the photograph of Bayer Inc. Consumer Care Division product Aspirin (ASA) 325 mg tablet was replaced by Aspirin (ASA) 325 mg caplet. For further information, please refer to the product monograph for Aspirin (ASA) on page 144 of the *CPS*.

We apologize for any inconvenience these errors may have caused our users.

Louise Welbanks

Acting Editor-in-Chief Canadian Pharmacists Association Ottawa, Ont.

Reference

 Canadian Pharmacists Association. Compendium of Pharmaceuticals and Specialties. 35th ed. Ottawa: The Association; 2000.