Letters

CMAJ publishes as many letters from our readers as possible. However, since space is limited, choices have to be made, on the basis of content and style. Letters that are clear, concise and convenient to edit (no longer than two double-spaced typescript pages, or 450 words) are more likely to be accepted. Those that are single-spaced, handwritten or longer than 450 words will usually be returned or not published. We reserve the right to edit letters for clarity and to abridge those that are unduly long or repeat points made in other letters, especially in the same issue.

Kawasaki disease: a measles cover-up?

Reports of Kawasaki disease began to appear in the late 1970s from developed countries, where except for Japan the recognition rate during nonepidemic periods has been about 10 cases per 100 000 children under the age of 5 years (R.D.R.: unpublished observations). Kawasaki disease is not seen in developing countries of Africa, South America and parts of Asia and is widely considered to be a new illness, increasing in incidence.

The mortality rate of Kawasaki disease is low, but because infantile periarteritis nodosa is today accepted as the extreme form of Kawasaki disease[1] it is possible from autopsy data to estimate the clinical base of patients with Kawasaki disease in a given period and setting. Using autopsy records for two 10-year periods at the Hospital for Sick Children, Toronto, we compared such predictions with the actual numbers of cases seen.

In the two periods, 1976–85 and 1951–60 there were 3647 and 3656 autopsies respectively, 2 for children with infantile periarteritis nodosa in each period. Assuming, from our experience, a mortality rate of 0.9% among patients with Kawasaki disease at our hospital during 1979–82 (the middle years of the later period) the numbers of cases predicted and seen are reasonably close: 222 and 278 respectively. For the earlier period, assuming a rate of 2% (that of the first year of mortality ascertainment in Japan in 1967[2]) a somewhat lower but appreciable number of live patients, 100, would be expected, yet only 2 were seen.

Although the predictions may be subject to error and not truly representative, the data suggest that over the past decade the recognition of Kawasaki disease has improved rather than the incidence increasing.

Many diseases mimic the early clinical features of Kawasaki disease, but viral rash syndromes, especially measles, seem more likely to have caused diagnostic difficulty in the past. A reduction in the incidence of measles in Canada to a very low level was not achieved until the late 1970s,[3] coincident with the first recognition of cases of Kawasaki disease in this country. A major increase in attack rates of Kawasaki disease in Japan occurred between 1977 and 1978 (H. Yanagawa: personal communication, 1984), following the introduction of a vaccination law in 1976.[4] The continuing endemicity of measles in countries where Kawasaki disease is not seen and the increasing recognition of Kawasaki disease as the measles rate has declined suggest that measles has masked Kawasaki disease until very recently in developed countries and continues to obscure the diagnosis in many other parts of the world.

Richard D. Rowe, MD, FRCPC
Vera Rose, MB, FRCPC
Gregory J. Wilson, MD, FRCPC
Nancy Lightfoot, MSc
Departments of Paediatrics
and Pathology
Hospital for Sick Children
Toronto, Ont.

References

1. Becker AE: Mucocutaneous lymph node syndrome or infantile polyarteritis nodosa? [C]. *Pediatrics* 1977; 60: 774

2. Yanagawa H: Results of eight nationwide surveys on Kawasaki disease. In Study Committee on Course of Kawasaki Disease, Japan Heart Foundation: *Kawasaki Disease Epidemiological Data Book*, Soft Sci Pubs, Tokyo, 1986: 38

3. Larke RPB: Impact of measles in Canada. *Rev Infect Dis* 1983; 5: 446–451

4. Hirayama M: Measles vaccines used in Japan. Ibid: 495–503