Bart J. Harvey and colleagues report a lower incidence of advanced breast cancer or death from breast cancer among women who were carefully instructed in the methods of breast self-examination (BSE) and who adequately implemented the program using optimal visual and palpatory techniques. It is clear from Table 3 of the article that only about half of the women so instructed actually practised any form of BSE, but I found no information as to the proportion of women who practised *optimal* forms of BSE. If this proportion was small in a clinical trial of this nature, we can be reasonably certain that it would be even smaller in the real world of clinical practice. Could the authors give us these figures?

Kenneth G. Marshall, MD
Stratford, Ont.
Received by email

[The authors respond:]

Dr. Marshall raises an important issue: How clinically applicable are the results of a clinical trial? In response, we would first like to clarify that Table 3 of our article summarizes women's self-reported screening practices *before* their entry into the Canadian National Breast Screening Study. In Table 1 accompanying this letter, we provide the information requested by Marshall. These results are similar to those found by Baines and To,[1] and we believe that they are applicable to the "real world of clinical practice."

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Reference

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Fluoridation and fracture

The article "Current and projected rates of hip fracture in Canada" (*CMAJ* 1997;157[10]:1357-63), by Emmanuel A. Papadimitropoulos and colleagues, exhibits the "view through the wrong end of the telescope" that is so often criticized as a deficiency of allopathic medicine. This paper is excellent, in terms of pointing to the seriousness of the problem of proximal femoral fracture (PFF) in the elderly. However, it presents a limited view with regard to the cause. The "grabber" in the first sentence is that "Osteoporosis is an important public health problem, especially in postmenopausal women." The "clincher" in the Discussion refers to "the serious implications for Canadians if incidence rates are not decreased by some form of intervention."

The interventions implied are hormone replacement therapy for postmenopausal women and therapy with calcium, vitamin D, bisphosphonates, calcitonin and fluoride. One important aspect not mentioned is the mounting evidence of a positive relation between excess fluoride intake and PFF, especially as a result of the fluoridation of drinking water. Although the references for this paper include articles by S.J. Jacobsen and C. Cooper, the epidemiological studies of the same authors showing a statistically significant relation between residence in a "fluoridated" community and PFF[1,2] are not cited. Also omitted are studies by other researchers showing a positive relation.[3–5]

The study reported in *CMAJ* found a lower incidence of PFF among men in BC than in the other 2 provinces studied — of the 3, BC happens to be the one with the least fluoridation. Several researchers have observed higher incidences of PFF in fluoridated than in non-fluoridated communities.[3,6,7]

The issue of the relation between fluoride and PFF is of concern at the level of government. For example, the *Toxicological Profile for Fluorides, Hydrogen Fluoride, and Fluorine (F)*, published by the Agency for Toxic Substances and Disease Registry, US Public Health Services, includes the following statement:[8]

The weight of evidence . . . suggests that fluoride added to water can increase the

Table 1: Practice characteristics of breast self-examination (BSE) among control subjects relative to year of screening during Canadian National Breast Screening Study

	Year of screening; % of control subjects			
BSE characteristic*	Year 2†	Year 3‡	Year 4§	Year 5‖
Visual examination	72.0	79.6	80.2	83.2
3 middle fingers used	62.8	70.9	74.8	77.6
Finger pads used	63.3	70.8	76.0	79.3
Systematic search used	73.8	79.5	82.8	84.9
Circular palpation used	46.8	54.9	59.5	61.5
Most of breast covered	65.1	68.6	70.6	74.2
Axillae examined	64.0	71.3	78.1	81.3
≥ 12 examinations performed per yr	46.8	51.6	53.6	56.5
All of first 3 practices included	37.1	48.7	54.8	60.9

*According to screen-examiner assessment.
†A total of 1252 control subjects assessed by screen-examiners, of whom 1236 (98.7%) reported practising BSE.
‡A total of 1458 control subjects assessed by screen-examiners, of whom 1442 (98.9%) reported practising BSE.
§A total of 1490 control subjects assessed by screen-examiners, of whom 1476 (99.1%) reported practising BSE.
‖A total of 1096 control subjects assessed by screen-examiners, of whom 1088 (99.3%) reported practising BSE.

risk of hip fracture in both elderly women and men. . . . If this effect is confirmed, it would mean that hip fracture in the elderly replaces dental fluorosis in children as the most sensitive end point of fluoride exposure.

The discontinuation of fluoridation should be considered — along with diet, exercise and decreased tobacco and alcohol consumption — as a frontline strategy to *prevent* PFF. The issue of prevention should be addressed before we immerse ourselves in the debate about which *treatment* is best and which causes the lowest incidence of iatrogenic illness.

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Corrections

My letter "Annual visits to GPs by elderly patients" (*CMAJ* 1998;158[3]:299) included an incorrect statement about odds ratios. The correct explanation of this measure is given here.

The odds for any event, $p/(1 - p)$, where p is the probability for the event, can never be negative, because p can never be greater than 1. Consequently, the odds ratio, which is calculated by dividing the odds for an event in the index category by the odds for the event in the reference category, can range from zero to infinity, but it can never be negative.

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Dr. Teik Chye Ooi's reply to a letter about his editorial on incidentalomas (*CMAJ* 1998;158[4]:474) included a typographic error that resulted in an incorrect statement. The second sentence of the third paragraph of his reply should have read as follows (correction in italics):

In light of the points made by Rappaport and Merchant, it might be considered somewhat *appropriate* to pronounce on the benign nature of a mass, but it is certainly inappropriate to pronounce on the function of the mass.

We apologize for the error. —