double-blind comparison of sertraline and nortriptyline in the treatment of depressed geriatric outpatients [poster]. American Psychiatric Assocation 148th annual meeting; 1995 May 20-25; Miami.
2. Thase ME, Fava M, Halbreich U, Kocsis JH, Koran L, Davidson J, et al. A placebo-controlled, randomized clinical trial comparing sertraline and imipramine for the treatment of dysthymia. *Arch Gen Psychiatry* 1996;53:777-84.
3. Simon GE, VonKorff M, Heiligenstein JH, Revicki DA, Grothaus L, Katon W, et al. Initial antidepressant choice in primary care. Effectiveness and cost of fluoxetine vs tricyclic antidepressants. *JAMA* 1996;275:1897-902.

The BSE advantage

In the article "Effect of breast self-examination techniques on the risk of death from breast cancer" (*CMAJ* 1997;157[9]:1205-12), Dr. Bart J. Harvey and colleagues conclude that breast self-examination (BSE) reduces the risk of death. However, in the accompanying editorial "Is breast self-examination still necessary?" (*CMAJ* 1997;157[9]:1225-6), Dr. Gregory Hislop questions the efficacy of BSE and therefore its value.

Tumour size and breast cancer prognosis are related, but it has never been clearly established that the difference in the size of a cancer discovered by a woman who routinely performs BSE and that of a lesion discovered incidentally influences the prognosis. In that regard, Harvey and colleagues have provided some important information.

In both articles, the authors concentrate on only a single reason for performing BSE, but not necessarily the most important one. Almost certainly the greatest benefit of regular BSE is the recognition and understanding of naturally occurring changes in the breast during the various phases of a woman's life. In young women, cyclic hormonal effects cause changes that are often perceived as abnormal by women not accustomed to regular BSE. At no time are these changes more evident than perimenopausally, a time when the prevalence of cancer begins to increase.[1] As more postmenopausal women receive hormone replacement therapy, such hormonal effects will continue into the postmenopausal stage, a time when the prevalence of cancer increases sharply.

A woman's knowledge about her breasts can greatly facilitate accurate diagnosis. Many physicians are insecure about breast diagnosis and are assisted when a woman is confident that a recently discovered abnormality is new and different. Similarly, insignificant changes can be dismissed and the need for invasive testing reduced.

The work of epidemiologists contributes to clinical decision-making, but some clinical functions do not lend themselves to statistical analysis or even reliable prospective clinical trials. Lack of hands-on clinical experience by investigators can result in a biased focus. It would be unfortunate if physicians did not encourage their

Research letter: Antibacterial activity of fluorescein

We conducted a simple experiment to determine if fluorescein has any antibacterial activity after one of us questioned its possible deleterious effect on bacteria if applied to an eye before collection of a swab for culture. A literature search failed to produce any information on this topic.

Antibiotic susceptibility plates (Mueller–Hinton medium, BBL, Baltimore, Md.) were streaked (according to the Kirby–Bauer method[1]) with 1×10^8 organisms/mL of the following ATCC (American Type Culture Collection) strains: *Moraxella catarrhalis*, *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Streptococcus pneumoniae* (Mueller–Hinton medium with 5% sheep blood) and *Haemophilus influenzae* (*Haemophilus* testing medium). A fluorescein sodium strip, instead of an antibiotic disk, was applied to each of the plates.

After overnight incubation at 35°C, a large zone of inhibition was observed around the fluorescein strip for *M. catarrhalis*, *S. pneumoniae* and *H. influenzae*. There was no inhibition zone for *S. aureus* or *P. aeruginosa*.

We conclude that swabs for culture should be taken before fluorescein is applied to the eye, because of its antibacterial activity against organisms such as *M. catarrhalis*, *S. pneumoniae* and *H. influenzae*, pathogens that are frequently found in the eye.

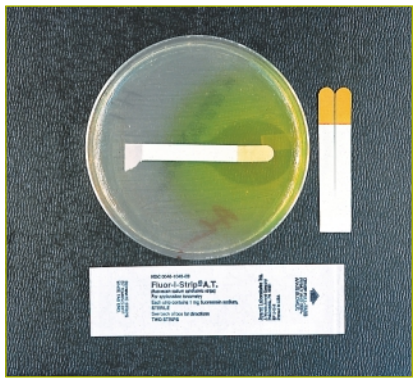

Fig. 1: A large zone of inhibition appears around a fluorescein strip in a *Haemophilus* testing medium plate. Also shown are 2 unused strips and the wrapper.

Jacques J. Roy, MD
Alfred Lau, ART
Microbiology Laboratory
Royal Columbian Hospital
New Westminster, BC
Douglas G. McFee, MD
Langley, BC

Reference

1. Bauer AW, et al. 1966. Antibiotic susceptibility testing by a standarized single-disk method. *Am J Clin Pathol* 1966;45:493-6.

patients to conduct monthly BSE because of a review with a relatively limited perspective. BSE is simple, safe, painless, cheap and, with the contribution of Harvey and colleagues, even more effective than I had previously considered.

Ernest E. Sterns, MD
Professor of Surgery
Queen's University
Kingston, Ont.

Reference

1. Sterns EE. Age-related breast diagnosis. *Can J Surg* 1992;35(1):41-5.

[Four of the authors respond:]

We agree with many of Dr. Stern's enthusiastic comments, in particular, the idea that a woman who knowledgeably performs BSE can facilitate diagnosis by drawing her physician's attention to newly developed abnormalities. In addition, she will avoid the false reassurance that may follow negative results from mammography or clinical examination.

However, we believe that the disadvantages of BSE practice must be borne in mind by all concerned. First, as the results of our study suggest, BSE is not a simple procedure. Simply performing BSE did not result in a lower risk of death from breast cancer. This benefit was limited to women who included 3 specific components in their BSE: visual examination of the breasts, use of the finger pads for palpation and breast examination with the 3 middle fingers.

Second, as we state in our article and as Frank and Mai[1] have described in greater detail, BSE practice should not be considered safe and painless. BSE poses risks such as unnecessary investigations — including invasive procedures — which may be particularly likely in younger women. In that respect we emphasize that the women in our study were all at least 40 years of age, and as such our results should not be applied to younger women. Like Frank and Mai, we are concerned that BSE performed by young women may result in more harm than good.

It is unfortunate that recent reviews of BSE have tended to be based on either poorly designed observational studies or premature results from randomized controlled trials conducted in populations at low risk for breast cancer. We agree that physicians should encourage patients who are more than 40 years of age to conduct monthly BSE and would add that this encouragement should be combined with a careful clinical examination of the patients' breasts, in which the specific components contributing to good BSE practice are carefully taught and then periodically assessed and reinforced.

Bart J. Harvey, MD, PhD
Assistant Professor
Anthony B. Miller, MB, ChB
Professor Emeritus
Cornelia J. Baines, MD, MSc
Associate Professor
Paul N. Corey, PhD
Professor
Department of Public Health Sciences
Faculty of Medicine
University of Toronto
Toronto, Ont.

Reference

1. Frank JW, Mai V. Breast self-examination in young women: More harm than good? *Lancet* 1985;2:654-7.

The imaging of incidentalomas

In the editorial "Adrenal incidentalomas: incidental in detection, not significance" (*CMAJ* 1997;157 [7]:903-4), Dr. Teik Chye Ooi states that radiologists may dismiss these adrenal masses as "benign and inactive" and indeed that they often suggest that "no further investigation is required." We feel that the radiologist's imaging interpretation should be used to direct further workup where applicable.

Extensive recent research on the imaging of adrenal adenomas has looked specifically at not only "shape, contour, margins, [and] signal intensity," as mentioned by Ooi, but also CT densitometry and chemical-shift imaging using MRI.[1,2] In our practice, needle biopsy of adrenal masses is rarely needed. The specificity of CT and MRI is greater than 95% in the differentiation of benign and malignant adrenal tumours. We agree with Ooi's assertion that differentiating a functioning tumour from a nonfunctioning one is not part of the imaging interpretation and therefore concur that biochemical workup is appropriate for adrenal incidentalomas.

Ooi suggests that expertise in interpretation of CT and MRI is often lacking. We submit that "the standard of practice" for the radiologist is to understand the image interpretation of adrenal incidentalomas and to know when densitometry and chemical-shift imaging would be appropriate. The cost-effectiveness of these procedures should be weighed against the cost of biopsy, surgical excision and the treatment of potential complications of adrenal biopsy, which occur in 1% to 11% of cases.[3]

We believe that teamwork should be used in the workup of an adrenal incidentaloma. The clinical aspects would include the history, a physical examination and appropriate biochemical tests. In the absence of any clinical abnormalities, further imaging should be based on the imaging that led to the discovery of the lesion. For example, if the abnormality was first discovered by CT performed without intravenous administration of contrast agent, the lesion's size, contour, shape and, most important, density can be analysed from the CT images. If the lesion is small (less than 3 cm in diameter) and has an attenuation of less than 0 Hounsfield units