

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

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Reference

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[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 Mai¹ 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 re-

sults 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 exmaination of the patients' breasts, in which the specific components contributing to good BSE practice are carefully taught and then periodically assessed and reinforced.

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Reference

 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 radiolo-

gist'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



(HU), no further workup is necessary. If the lesion is small and the attenuation is between 0 and 18 HU, a follow-up examination might be helpful. Even for lesions for which the threshold of 18 HU is used, the specificity of diagnosing the lesion as benign is reportedly up to 100%.

Indeterminate lesions may benefit from MRI, including chemical-shift imaging for the assessment of subtle intracytoplasmic lipid, which commonly occurs in benign adenomas. If MRI is unavailable, then follow-up imaging after an appropriate interval is reasonable. In rare circumstances biopsy may be required.

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[The author responds:]

The main point made by Drs. Rappaport and Merchant seems to be that imaging techniques are getting better at distinguishing between benign and malignant adrenal masses, an encouraging view that was perhaps inadequately emphasized in my editorial. Although I appreciate the comments of Rappaport and Merchant, I wish to make 2 points in response.

First, Rappaport and Merchant have misread my position concerning the value of fine-needle aspiration biopsy. I stated that this technique was useful in detecting metastatic disease in the adrenal gland but was "not useful in distinguishing benign from malignant primary adrenal tumours." In a clinical situation where metastatic disease is not suspected, I do *not* advocate biopsy, and I agree that biopsy is rarely needed in the context of an incidentally discovered adrenal mass.

Second, I was simply stating a fact

when I said that imaging reports on incidentally discovered adrenal masses "sometimes" (not "often," as misquoted in the letter) state categorically that the masses are benign and inactive and that no further investigation is required. In light of the points made by Rappaport and Merchant, it might be considered somewhat inappropriate to pronounce on the benign nature of a mass, but it is certainly inappropriate to pronounce on the function of the mass. In such a situation, a radiologist's statement that no further investigation is required may be misleading.

Allow me to reiterate the point that the term "adrenal incidentaloma" should not be used to mean "benign, nonfunctioning adrenocortical tumour." As the title of my editorial states, the mass is incidental only in its detection, not in its ultimate pathologic characteristics and function. Once an adrenal incidentaloma has been detected, further investigation can reveal it to be benign or malignant, hormonally active or inactive.

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