POC testing can also be done by physicians or nurses and nurse practitioners, and is a great learning opportunity for medical residents.

This POC INR model is an alternative that could be considered to further improve INR management in the community.

> —Deanna Telner MD MEd CCFP FCFP —Jennifer Lake PharmD —Gursharan Soor MD CCFP —Jennifer Rossiter MD CCFP —Babak Aliarzadeh MD MPH CCRA Toronto, Ont

## Competing interests

None declared

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# Measuring visceral adiposity

fter reading the article "Normal-weight central obesity. Unique hazard of the toxic waist" in the June issue of Canadian Family Physician, 1 I wanted to note that I find waist circumference to be an extremely inaccurate measure of visceral adiposity, which is located mostly in the anterior abdominal bulge, while "love handles" and subcutaneous adiposity cause very limited metabolic risk compared with visceral and ectopic fat. Short-2 and long-term<sup>3</sup> effects on the metabolic profile (including inflammatory markers, blood pressure, plasma lipid profile, and insulin resistance) of large-volume liposuction (about 20% to 40% of excess body fat), mostly from the waist area, were no different after removing the large amounts of fat.

I think we should focus more on the anterior abdominal bulge than the whole waist circumference.

> —Mohammed Abrahim MD CCFP(EM) DipABOM Milton. Ont

## **Competing interests**

None declared

- 1. Bosomworth NJ. Normal-weight central obesity. Unique hazard of the toxic waist. Can Fam Physician 2019;65:399-408 (Eng), e251-60 (Fr).
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## Response

thank Dr Abrahim for his comments in response to my article "Normal-weight central obesity. Unique hazard of the toxic waist," published in the June issue of Canadian Family Physician. There is little doubt that waist circumference (WC) should be a very unreliable measurement for the proportion of visceral to subcutaneous (SC) fat, and there is even no universal consensus surrounding where to measure or what the

measurement cutoff value for risk should be. In spite of this, the anthropometric measures of abdominal obesity have surprisingly high correlations with mortality. Perhaps if we had simple and reliable ways of measuring only the high-risk visceral component, the association would be even stronger.

Several studies using computed tomography have shown that the ratio of visceral fat to SC fat is an independent predictor of cardiac events and mortality.<sup>2,3</sup> This ratio is likely to be larger in the lean centrally obese than in the globally obese who have a much thicker abdominal SC fat layer, lending some credence to the possibility that SC fat might offer some protection against the ravages wrought by visceral fat.

In lean centrally obese people the SC fat partition would be expected to be a smaller part of the waist circumference component than in the globally obese. It has been shown that, as obesity increases, the infiltration of macrophages and inflammatory activity increases markedly in visceral fat,4 perhaps helping to explain why the large contribution of subcutaneous fat to WC measurement does not greatly diminish the value of this metric in predicting cardiometabolic events.

It would seem that no matter how inexact WC measurement is, it consistently identifies mortality risk better than body mass index does. A pragmatic metric such as waistto-height ratio then allows a busy family physician to flag this risk if WC exceeds half the patient's height. This is at least equally important if the person is not globally obese.

> —N. John Bosomworth MD CCFP FCFP Vancouver, BC

## **Competing interests**

None declared

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## Correction

n the article "Differentiating malignant melanoma from other lesions using dermoscopy," which appeared in the June issue of Canadian Family Physician,1 the authors were listed in the incorrect order. The correct order is as follows:

Ahmed Mourad Robert Gniadecki MD PhD DMSci

The authors apologize for this error and any confusion it might have caused. The online version has been corrected.

## Reference

1. Gniadecki R, Mourad A. Differentiating malignant melanoma from other lesions using dermoscopy. Can Fam Physician 2019;65:412-4 (Eng), e261-3 (Fr).