

resolves without sequelae once recovery is complete. Patients often report not being able to remember speaking in their second language after the fixation event, and more intriguingly, even deny an ability to speak their second language at all (when not having spoken it voluntarily for many years).

It is well known that the production of a first language is associated with Broca's area, while production of a second language that is acquired after approximately the age of seven can involve a number of cortical areas in both hemispheres.<sup>9</sup> I previously have hypothesized that this fact might explain why it is that language switching under the effects of anesthesia appears to occur in only one direction, that is, from first to second language.<sup>9</sup> The idea being that if there are a number of scattered brain areas associated with a second language, but only one area for a first language, there may be a greater chance that an anesthetic agent that differentially affects brain structures could impair the first language while functionally sparing some of the more numerous areas associated with the second language.

Hashmi *et al.* provide quantitative evidence suggesting that something like this may, in fact, be occurring.<sup>2</sup> If loss of consciousness is due to the blocking of certain information "hubs" in the brain, reducing the efficiency of global information transfer, even in the face of remaining local brain activity, then Broca's area is likely to be such a hub for the production of the patient's first language. With a blocked first-language hub, local networks that remain active may contain some of the more numerous areas capable of producing the patient's second language. This also could explain why patients often do not remember speaking in their second language, given the impairment of global information networks and conscious awareness. This language switching phenomena may be underreported. If the patient's second language is not recognized by those attending the patient at the time, it is likely that the fixation event would simply be put down to postoperative confusion (in three of the known cases only a single staff member spoke the patient's second language). If a way could be devised to study this rare phenomenon more systematically, the large number of anesthetic procedures conducted throughout the world every day would present a valuable opportunity for a natural experiment with the potential to tell us much about language and consciousness.

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### Competing Interests

The author owns a small number of shares in Safer Sleep Ltd. (London, United Kingdom), a company that aims to

improve safety during anesthesia, but this is unrelated to the topic of this letter.

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## Ideal Body Weight Is Not Really Ideal

*To the Editor:*

As Moreault *et al.*<sup>1</sup> recently discussed in this journal, some anesthetic management guidelines as well as many drug dosing regimens<sup>2</sup> are based on a patient's ideal body weight (IBW). Despite being an important measure in clinical practice, there is no consensus as to what IBW really represents or how to calculate it.<sup>3</sup> IBW has no physiologic basis and there is no single weight that is ideal for any patient of a given height.<sup>4</sup> For both men and women, IBW often is described as a body mass index (BMI; BMI = kg/m<sup>2</sup>) between 20 and 25 kg/m<sup>2</sup>. BMI is not a measure of adiposity because it considers weight irrespective of the source, and excess amounts of fluid, muscle, and bone can each increase BMI.

Given that adipose is poorly perfused and contributes minimally to metabolism, fat-free mass or lean body weight (LBW) would be a better measure for clinical purposes. LBW can be obtained using dual-energy x-ray absorptiometry, but measurements are cumbersome and difficult to apply in clinical medicine.<sup>5</sup> The many formulae currently used to estimate IBW give widely different values for the same patient.

This letter was sent to the author of the editorial view referenced above (Mashour), who declined to respond. —Evan D. Kharasch, M.D., Ph.D., Editor-in-Chief

This letter was sent to the author of the original article referenced above (Hashmi). The authors declined to reply, explaining that the subject matter referenced is beyond the scope of their expertise. —Evan D. Kharasch, M.D., Ph.D., Editor-in-Chief

In the absence of a simple equation for LBW, we agree with Moreault *et al.* that height ( $M^2$ )  $\times$  22 is a simple formula that can be used clinically to estimate ideal weight.<sup>1,4</sup>

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The authors declare no competing interests.

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