in Table 3 on page 928. Was this an oversight or an intentional omission?

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In reply: We agree that a careful thyroid assessment is important in routine clinical practice, particularly in certain populations, such as patients presenting with unintentional weight loss. As pointed out in the article, both hyperthyroidism and hypothyroidism can be associated with unintentional weight loss. Secondary to an oversight, thyroid function studies were not included in the final draft of the algorithm (Figure 1, page 927). These tests should be included as part of the “standard tests.”

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The Aldosterone-Renin Ratio and Primary Aldosteronism

To the Editor: Montori and coworkers1 have attempted to discredit the aldosterone-renin ratio (ARR) as a screening test for primary aldosteronism (PAL) by reporting that, in a group of 497 patients with “previously diagnosed essential hypertension,” plasma aldosterone (PA) was only weakly dependent on plasma renin activity (PRA). The view is supported in an accompanying editorial by Kaplan.2 However, no one experienced in this area would have found a simple relationship between PA and PRA, even in clinically normal individuals, because PA responds to potassium and corticotropin as well as to angiotensin II. It is for this reason that the ARR is only a screening test, which we measure at least twice to keep total aldosterone levels appropriate for the body’s needs,4 and ARR becomes more renin dependent. Montori et al pos-
enced in this area would have expected to find a simple relationship” between PA concentration and PRA is the essence of the argument against the ARR. The concomitant effects of potassium and corticotropin also underscore the advocates’ disconnect in logic, since they do not propose dividing PA concentration by these other influential covariates.

The admonition that the ARR should be measured twice exposes another weakness inherent to a calculation based on measurements that vary considerably within an individual. Of course, intraindividual variation also diminishes the effectiveness of alternative screening methods based on measurements of PA concentration and PRA. However, testimonials fall short of explaining how or why a single calculated number can provide more information than the 2 measured values required for calculation of the ARR.

In 1949, Tanner summarized the troubled history of ratio variables in medicine: “Examples immediately came to light where investigators had drawn positive conclusions not justified by their data, ... had proposed a less effective and more biased normal standard in preference to a more effective and less biased one, ... and had invented a new clinical syndrome.” The findings of our study suggest that the ARR is no exception.

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In reply: Montori et al and I are aware that aldosterone production is not solely dependent on the renin-angiotensin mechanism. Nonetheless, virtually every proven case of autonomous PAL is associated with suppressed renin-angiotensin, even the 50 presumably renin-dependent cases.

Their point that “[e]arly in the development of PAL, autonomous aldosterone makes up a gradually increasing proportion of total production” is, of course, the case in every endocrinopathy with hormonal excess. They may be correct that using a cutoff upright PA level of 20 ng/dL would exclude 20% of patients eventually found to have an APA. So what? Since most patients with an abnormal ARR turn out to have bilateral hyperplasia and should never be subjected to surgery, there is no need to do the expensive, expensive, and often inaccurate work-up required to exclude an APA. Rather, these patients should be given medical therapy, usually with the aldosterone antagonist spironolactone, which usually cures the problem.

The minority of patients, those with APA, should likely have the tumor removed, preferably by laparoscopic adrenalectomy. These patients usually present with more overt manifestations, including hypokalemia. Although some with an APA are normokalemic (so that hypokalemia cannot be used as a screening test), the argument again can be made not to put the normokalemic patients through an extensive work-up if their hypertension can be controlled medically.

All of us are attracted to the cure of hypertension. But why subject many hypertensive patients to unnecessary work-ups if they are not threatened by hypokalemia, if their hypertension can be controlled medically, and if, even in the best of hands, errors are made in removing adrenal incidentalomas and hyperplastic glands.

Gordon and Stowasser are to be congratulated for showing us that PAL is more common than most believed 10 years ago. But let’s not let their enthusiasm carry over to widespread unnecessary work-ups and, sometimes, unnecessary surgery.

My response to their plea that we diagnose and treat many more patients with aldosteronism remains unchanged. We should work up and diagnose those with unprovoked hypokalemia, a family history of aldosteronism, or difficult to control hypertension. But first, do no harm.

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The Shortage of Anesthesiologists—and Other Medical Specialists

To the Editor: The article on the shortfall in anesthesia care providers raised many unanswered questions for other specialists, including internists and surgeons, most importantly how to implement an effective national system that addresses the number of specialists required to provide optimal health care. In contrast to the oversimplified approach highlighted by Schubert et al, which was based on a single snapshot analysis of data driven by incomplete economic analysis, we propose the establishment of a series of standing interdisciplinary committees to reevaluate specialty training needs on an ongoing basis.

Specifically, we recommend a core group of statisticians, health economists, legislators, regulators, and insurers be established and funded to serve as a permanent oversight committee. This committee would convene on a regular basis with academic and community physician representatives from individual specialties (eg, internal medicine, anesthesiaology, or surgery) and subspecialty groups (eg, gastroenterology, critical care, or urology). Together, they would be charged with identifying supply/demand economic factors that have an impact on specialty personnel needs such as reimbursement, cost of training, and insurer and governmental expenditures. The group would establish criteria to address manpower require-