2. Kienbaum P, Thurauf N, Michel MC, Scherbaum N, Gastpar M, Peters J: Profound increase in epinephrine concentration in plasma and cardiovascular stimulation after μ-opioid receptor blockade in opioid-addicted patients during barbiturate-induced anesthesia for acute detoxification. ANESTHESIOLOGY 1998; 88:1154–61

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In Reply:—I am sorry that Drs. Markowitz and Solomon misinterpreted my editorial comments. I meant to say that we really do not have any idea about the mechanism by which general anesthesia facilitates detoxification from opioid addiction. Is the mechanism, as stated, a rapid passage through withdrawal while unconscious? If that is the mechanism of action, we should see a recidivism rate after this therapy equal to that with other treatment—not a happy prospect.

The real potential of this therapy is the *possibility* that general anesthesia may facilitate a change in basic brain biochemistry or teach us something new about the mechanisms of addiction. Much research remains to be done in this area.

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Benchmarking Anesthesia Costs

To the Editor:—Dexter *et al.*,[1] showed that total direct anesthesia costs for supplies and drugs expressed as "cost per units" provided a statistic with a much lower coefficient of variation than would be found if expressed as "cost per case." That this would be true is intuitively obvious to anyone familiar with the practice of anesthesiology, yet the authors provided a valuable piece of work by rigorously testing the hypothesis.

The authors suggest that this method of reporting costs would be sufficient to serve as a benchmarking tool. The tool is deemed useful in comparing the performances of different anesthesia providers (or groups of providers) while fairly normalizing for variations in case complexity and useful in projecting the costs inherent in planned new ventures at outlying institutions. Based on their findings, the authors are entitled to assert that cost per unit would be better than cost per case but not to ascribe a broader utility.

Table 4 shows clearly the wide variation across surgical services even when using a cost-per-unit statistic. Departmental reviews using this method will surely thrust the cardiothoracic anesthesiologists, whose costs are $3.9 per unit, onto the defensive with their neurosurgical anesthesia colleagues, whose costs are $2.2 per unit. Such a large difference will not promote constructive discussion. Similarly, in comparing different groups (presumably from different institutions) differences in case mix between hospitals will confound any attempt at a fair comparison.

Beyond the proper goal to prove the hypothesis, the authors' work demonstrates the need to commit to building databases of relevant information, as they have done. The authors' data support the notion that simplistic descriptors are not sufficient to the tasks of benchmarking and projecting costs reliably.

Finally, I believe table 1 must have a typographic error because it reports time units as being 46 ± 28.

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