

Letters to the Editor

To the Editor: The provocative paper by Davies et al. (1) argues that there is no justification for language mapping in epilepsy patients undergoing dominant hemisphere anterior temporal lobectomy (ATL). We urge caution in applying this conclusion to other epilepsy surgery programs, based on three concerns about the validity and generalizability of their findings.

1. Grouping of data. The authors' methodology could easily mask adverse effects of surgery on language abilities of individual patients. By grouping a few impaired patients with the majority of patients whose speech abilities were unaffected by the surgery, it is possible to lose sight of deficits that could be of considerable importance to the individual patient. We have mapped language functions in 35 of 38 patients who have undergone dominant hemisphere temporal lobectomies at our medical center in the past 4 years and have modified the surgical resection in 9 cases (26%) based on those data (2). In 7, some or all of the superior temporal gyrus and middle temporal gyrus were spared; in 2, only an amygdalo-hippocampectomy was performed. Therefore, most of our patients received the standard temporal lobectomy even after language mapping. It is statistically possible that the scores of the few adversely affected patients in the of Davies et al. series would have been insufficient to influence the postsurgery outcome for the ethnic group. The same point was made previously (3) with evidence indicating ~7% of patients without language mapping may have a significant decrease in language abilities after surgery.
2. Choice of tasks—practice effects. The variables used to index verbal abilities are biased toward attentional tasks (e.g., verbal fluency, arithmetic, and digit span) that might remain stable or even improve after excision of the epileptogenic focus. Indeed, right (nondominant) ATL patients showed significant improvements in verbal fluency and Performance I.Q. and marginal gains in Full-Scale I.Q., a pattern of change similar to that observed in the patients undergoing dominant ATL, suggesting that the change is related to something other than language improvement. By listing many stable but irrelevant verbal abilities, one could obtain the false impression that the surgery has little or no effect on the relevant abilities.

3. Sample differences. The authors do not address the possibility that patients in their sample may differ significantly from those of other epilepsy surgery groups. Their patients' preoperative average Boston Naming Scores are higher than the typical scores of our patients (2), and their incidence of seizure-free outcome (57%) is lower than that generally reported (70–80%).

These possible group differences require caution before the authors' conclusion is generalized to other circumstances.

Henry A. Buchtel
Karen J. Kluin
Donald A. Ross
Linda M. Selwa
*Epilepsy Surgery Program
Ann Arbor, Michigan
University of Michigan Medical Center*

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3. Hermann BP, Wyler AR, Somes G, Clement L. Dysnomia after left anterior temporal lobectomy without functional mapping: frequency and correlates. *Neurosurgery* 1994; 35:52–6.

To the Editor: Buchtel et al. make several interesting points. We were aware of criticisms that analysis of group data may mask individual declines in language abilities and also of the work of Hermann et al. which showed that ~7% of patients undergoing anterior temporal lobectomy (ATL) without functional mapping may be at risk for postoperative dysnomia (1). To address this, I have analyzed the individual scores for the Boston Naming Test (BNT) for the same patients reported in our article. For those undergoing left-sided dominant resection for whom a BNT score was available pre- and postoperatively (n = 21), 7 had a decrease in score and the greatest individual decrease was 6 points (mean decrease 4 points). An increase in score occurred in 13 cases (mean increase 5 points, maximum 15 points). For the right-sided nondominant cases, the greatest individual decline was 8 points (mean 3 points). The amount of point de-