patients who were without loss of consciousness or amnesia who later required evacuation of a hematoma. Delayed hematomas are also an issue of concern. However, to safeguard 100% against these and other remote possibilities would require hospital admission and serial CT of every patient, even those trivially injured. The costs would be prohibitive and the yield almost nil.

The debate about patients with a Glasgow Coma Scale score of 15 enters on what level of certainty is medically warranted. If there is a heightened level of suspicion, CT is always justified. We have found that the patients with a perfect Glasgow Coma Scale score who need emergency CT will “announce” themselves by deteriorating soon after they arrive in the emergency room. This is not an iron-clad guarantee that not a single patient with a critical hematoma will ever escape detection and be discharged. However, it is a rational algorithm for head trauma management that is appropriate even in hospitals where CT scanning is not immediately available. Those who later develop neuropsychological deterioration could be scheduled for magnetic resonance imaging.

Joseph S. Jeret
Brian J. Anziska
Brooklyn, New York

REFERENCES: (1,2)


Motor and Sensory Cortex in Humans: Topography Study With Chronic Subdural Stimulation

To the Editor: I read with interest the article by Uematsu et al. (9) concerning the anatomical location of physiological responses in the central area. I would concur with the comments of Dr. Mitchel Berger and would add a further comment concerning the second technique for identifying the Rolandic fissure on a magnetic resonance imaging scan.

Use of the anterior posterior commissure line, as developed originally by Talairach and Tournoux, has been studied further by Steinmetz et al. (8). The sulcal variation zone measured anywhere from 1.5 to 2 cm, so that the proportional coordinates of the Talairach system could not be used for precise definition of anatomic landmarks in the central area, in particular, laterally and inferiorly.

A more complete and integrated system using stereoscopic arteriovenous digital subtraction angiography and magnetic resonance imaging, described originally by Olivier and De Lotbiniere (5), Olivier (6,7), and, more recently, in depth by Lehman and Olivier (2,4) and Lehman et al. (3), reveals that a callosal reference system more accurately delineates the central area, particularly with the midcallosal line intersecting the central sulcus inferiorly where the central artery passes into it. Magnetic resonance imaging and DSS anatomic points can be superimposed, based on this callosal reference system.

Moreover, in reviewing the anatomic evidence of the case in its cited article by Jane et al. (1), it is interesting that the face area of the precentral gyrus was not resected, which would decrease the number of pyramidal fibers present in the medullary pyramidal. Finally, I am wondering whether a 10-mm interelectrode contact would produce difficulties for localization by stimulation.

Richard M. Lehman
New Brunswick, New Jersey

REFERENCES: (1-9)


In reply: Dr. Lehman’s comment has three aspects, which are: 1) his question regarding the number of pyramidal fibers cited in the article by Jane et al.; 2)