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Reply:

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We read with interest the letter from Dr. Valencia-Calderón. The neuronavigation system can be coupled with 7T MR images as a working examination devised to help the surgeon define the epileptogenic area without invasive recordings. Specifically, in focal cortical dysplasia, especially type I, which is mainly defined as a disorder of cortical lamination, anatomic boundaries are ill-defined and epileptogenic activity, which is poorly delimited, often requires depth electrodes for accurate mapping. In this context, the outcome of epilepsy surgery is strictly dependent on complete removal, which is more easily achieved if 7T MR imaging is available. For low-grade gliomas, on the other hand, many suggest supramaximal resection whenever possible to prevent tumor recurrence and malignant transformation. In this context, again, ultra-high-field 7T MR imaging can also be a valid tool for neurooncologic surgical purposes. On this basis, we encourage large referral centers to seek 7T MR imaging support for elective neurosurgery.

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