Response to the editorials

Radiosurgery and radiation oncology

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The authors of the editorials have succinctly summarized and largely supported the arguments and recommendations expressed in our manuscript.

Dr. Sheehan stresses the importance of neurosurgeons having a thorough understanding of the relevant medical physics and radiobiology that underlie radiosurgery. To this list we would add that neurosurgeons performing radiosurgery should have a reasonable familiarity and facility with the technical processes needed to generate acceptable treatment plans. Radiation oncologists and medical physicists will better accept a partnership with surgeons who possess this broad knowledge.

Dr. Konziolka stresses the importance to our patients of a multidisciplinary approach to radiosurgery, which involves neurosurgeons, radiation oncologists, and medical physicists. He rightfully emphasizes the unique requirements for quality assurance intrinsic to radiosurgery and the advantages of different team members checking the work of one another. Although each discipline initially brings different expertise to the table, over time, individual members of the team will learn enough from each other to provide the critical redundancy needed to maximize both the efficacy and overall safety of this procedure. It is with this concern in mind that we stress that individual radiosurgical tasks be unbundled with separate codes. In doing so these codes should follow the radiation oncology model, which would result in reimbursement for such tasks being equivalent across specialties.

Dr. Maciunas poignantly stresses that “Being the best we can be for those who entrust themselves to our care” requires that we ensure that the partnership between all surgeons and radiation oncologists performing radiosurgery not continue along its present adversarial downward course. We believe fervently that leaders of surgery and radiation oncology must continue to address this problem and work with the involved specialties to reverse this trend.

We do take issue with Dr. Konziolka’s statement that there is not enough data-based outcome evidence for the application of radiosurgery methods to other body organs to recommend consistent coding. Consistent coding does not mean identical coding. Neurosurgeons such as ourselves and Dr. Maciunas have been involved with recruiting, training, and interacting with surgeons from other surgical specialties who have now been performing radiosurgery for more than 5 years. Clearly these surgeons benefit from neurosurgery’s 25 years of cranial radiosurgery experience. Properly presented results of our neurosurgical radiosurgery experience—noting both triumphs and failures, and the resulting indication and technique adjustments—have served to shorten the learning curve for other specialties. Those of us who have worked with thoracic surgeons, surgical oncologists, and urologists know well the complexity of treatment planning for a lung lesion close to the mediastinum and/or the spine, a pancreas lesion close to the duodenum and its entering ducts, or a prostate lesion that requires protecting the urethra and rectum as critical adjacent anatomical structures. Let us not demean other organs as requiring less demanding treatment planning than the brain or spine. In this regard, Dr. Maciunas’ statements completely support our perspective.

After many years of initial resistance by many in our specialty, radiosurgery methods are now essential components of standard neurosurgical practice. We believe strongly that radiosurgical techniques can and should now become essential components of other surgical practices. With appropriate recognition by radiation oncologists of the required training in radiosurgery methods that both residents and practicing surgeons currently receive, we are confident that this important multidisciplinary partnership can thrive going forward.

Please include this information when citing this paper: published online February 19, 2010; DOI: 10.3171/2010.1.JNS091593.