LETTERS TO THE EDITOR

Error in obituary

TO THE EDITOR: I read with deep interest the obituary on Charles B. Wilson submitted by Dr. Berger, Ms. Garner, and Dr. McDermott1 (Berger MS, Garner IV, McDermott MW: Obituary. Charles B. Wilson, MD, 1929–2018. J Neurosurg 129:547–550, August 2018). Dr. Wilson was a legend in his own time, and though many of his residents have achieved extraordinary success, his influence extended far beyond his immediate program and trainees.

I wish to correct a minor error on the second page, second paragraph: “In 1958, Wilson became the first neurosurgical resident at the VA Medical Center of New Orleans, working under Lewellyn Rayburn and maintaining his interest in both pathology and gliomas.” The correct name for the attending neurosurgeon is Raeburn C. Llewellyn, MD. Dr. Llewellyn was chief of the Tulane University Division of Neurosurgery during my years in Tulane Medical School from 1970 to 1973. He was pivotal in my decision to include an application for neurosurgery residency at the University of Kentucky, where he said two of his former residents, Charles B. Wilson and Horace A. Norrell, relocated from New Orleans, receiving appointments to the neurosurgery faculty. Dr. Llewellyn was born in Corbin, Kentucky, attended medical school at the University of Virginia, and did his neurosurgery training in New Orleans. He was on the Tulane faculty from 1960 to 1979. Dr. Llewellyn passed away in New Orleans in 2009 at 89 years of age.2

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References

Disclosures
The author reports no conflict of interest.

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Response
We thank Dr. Bean for the correction regarding the correct name of Dr. Llewellyn. We would also like to thank Dr. John J. Moossy, who submitted a letter to the Journal of Neurosurgery editorial office stating that his father’s name was also misspelled in the obituary.

The record is now correct.

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Cafeteria approach to management of trigeminal neuralgia: stereotactic radiosurgery as a preferred option

TO THE EDITOR: We have read with great interest the article by Tuleasca and colleagues3 (Tuleasca C, Régis J, Sahgal A, et al: Stereotactic radiosurgery for trigeminal neuralgia: a systematic review. J Neurosurg [epub ahead of print April 27, 2018. DOI: 10.3171/2017.9.JNS17545]).

Trigeminal neuralgia (TN) has always been a disease of conflict from pathological and treatment perspectives. Despite advances in radiological imaging, evidence from autopsy studies, and intraoperative findings, concrete answers are still not in sight. A cafeteria approach ranging from conservative treatment (medications) through minimally invasive surgery (radiosurgery, radiofrequency ablation, etc.) to microvascular decompression (MVD) in itself shows that we are still missing something. Gamma Knife surgery (GKS) has been considered a natural extension to microneurosurgery, and its role in the management of typical TN has been both competitive and supplemental to microsurgical interventions. Neurosurgeons in the currently practicing generation are mostly familiar with all of the management options, and most have an inherent bias in deciding on management plans as per availability of treatment options (such as radiosurgery),
cost-effectiveness analysis, personal experience, and acceptance of the risk-benefit ratio in an Internet-savvy patient population. TN remains one of the most common neurosurgical ailments attracting medicolegal lawsuits against the practitioners. The comparable success rate of radiosurgery without the surgical risks has made GKS a preferred treatment modality among the majority of the patient population.

This systematic literature review by Tuleasca et al. has provided evidence-based recommendations, which definitely enrich the existing literature and help in guiding treatment options in different clinical settings. The authors advise not irradiating a longer length of the trigeminal nerve to minimize the Flickinger effect (level I evidence) and using a single 4-mm collimator shot without any beam blocking. A longer length increases the chance of sensory dysfunction in the form of hypesthesia in the trigeminal nerve distribution, which we have also observed personally. However, hypesthesia is rarely bothersome to the patients, as the pain relief is better with longer length exposed. Still, MVD is considered to be the reference treatment modality (especially in the younger population), although the surgical approach is relatively technically demanding and involves risk. On the other hand, GKS is a safe, repeatable, and cost-effective technique. Whether MVD should always be preferred in the younger age group remains a debatable question, as GKS provides similar pain relief to this population and patients can safely undergo MVD in the event of radiosurgical failure. It has already been proven that post-GKS MVD does not entail any additional technical difficulty beyond MVD as initial treatment and its safety has been demonstrated. Another highlighted point is superiority of GKS over linear accelerator (LINAC) and CyberKnife radiosurgery with less complication of bothersome hypesthesia (level III evidence). An anterior point with higher radiation dose (90 Gy) should be preferred (level II and III evidence). 

The authors should be congratulated for their extensive review of the published literature on this common disease. Similar reviews should be solicited on secondary trigeminal neuralgias and atypical trigeminal neuralgias for better understanding and evidence-based management.

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References

Disclosures
The author reports no conflict of interest.

Response
We thank Drs. Tripathi and Batish for their interest and support with regard to our recently published paper in the Journal of Neurosurgery. Drs. Tripathi and Batish mention several technical nuances of radiosurgery in TN. One is to irradiate a longer length of the treated nerve. However, the Flickinger trial (prospective, double-blind, and randomized) clearly advocated for an identical pain relief for 1 versus 2 isocenters radiosurgery, while complications may be increased using 2 isocenters. Another issue is that GKS would be a safe, repeatable, and cost-effective treatment. The safety and efficacy of GKS is now well demonstrated, even on a long-term basis. Nevertheless, repeat GKS is associated with a higher rate of sensory dysfunction and should be performed cautiously and only if a first GKS has been effective for a long period. Performing an MVD after prior GKS has been considered more surgically challenging by some authors.

The eternal debate of the reference technique (especially MVD or radiosurgery) will persist in the absence of a randomized trial, which is difficult to organize due to multiple issues. The only prospective, non-randomized trial comparing MVD and GKS was published by Linskey et al. After a mean follow-up period of 3.4 ± 2.14 years, the initial and last follow-up pain-freedom rates were 100% and 80.6% for MVD and 77.3% and 45.5% for GKS, respectively. Pollock et al. addressed the same issue in patients less than 70 years old undergoing posterior fossa exploration or GKS. After a mean follow-up of 25.5 months, the patients who had undergone MVD more commonly had pain relief without medication. We do agree that MVD involves several risks, which have already been underscored. It is still considered the reference technique by several authors, as it addresses what one would consider as the underlying cause of this disease (e.g., the neurovascular conflict).

Each of the techniques available for treatment of TN has its own application, depending on the characteristics of the individual patient (i.e., intensity of pain, response to and tolerance of medication, medical comorbidities, expectations, involvement of different branches of the trigeminal nerve—factors defining the algorithm of treatment). When the neurosurgical unit treating the patient has access to all techniques, the most appropriate one can be chosen.

We thank Drs. Tripathi and Batish for their appreciation of our work. We continue to strive to provide our patients with evidence-based care in the framework of a personalized approach. The “cafeteria approach,” as the authors nicely called it, should be adapted to the patient’s particular case, while accurately explaining the safety and efficacy of each approach. In this spirit, the surgical management of TN should be evidence-based, with radiosurgery being one of the interventional alternatives. The authors of these guidelines have remained impartial, as their role was not to favor one technique over another, but to present objective data and correct scientific interpretation.