Editorial

What Next? The Transformation of Skull Base Surgery From a Technical Procedure to a Paradigm-Based Discipline

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Harvey Cushing said “I would like to see the day when somebody would be appointed surgeon somewhere who had no hands, for the operative part is the least part of the work.” He was, of course, the greatest surgeon of his time, someone whose achievements everyone would wish to emulate. In that simple quotation he recognized a major problem that beset the surgeons of his time and those of every successive generation. In other words, how to select the most appropriate treatment for our patients.

Now, almost 75 years after Harvey Cushing's death, patients demand the evidence that the treatments we recommend are effective and in their best interests. Our health care systems will not tolerate or fund therapies based on anecdote, treatments that offer little more than hope of a good outcome. For even the most common skull base tumor, vestibular schwannoma, there is no evidence from a randomized controlled trial that surgery is better than stereotactic radiotherapy, radiosurgery, or vice versa. Nevertheless, we practice perfectly ethically identifying those patients for whom treatment rather “watchful waiting” is indicated. We guide our patients in the selection of their treatment while respecting their inherent right to choose. For the majority of patients, recommendations would be based on such factors as tumor size, age, co-morbidities, hearing acuity, balance disturbance, other cranial nerve deficits, and the availability of surgical or

radiation oncology expertise. Even with the most common skull base tumor, there are wide variations in clinical practice from country to country and mounting evidence, particularly with small tumors, that practices are changing.

How much more difficult it is to recommend treatment for diseases that are not common. Sadly a large number of the skull base tumors fall into this category. For patients with these conditions we rely on inferior levels of evidence often acquired on the basis of data from sites other than the skull base. The time has come to make amends, to use the power of meta-analysis and well-structured systematic reviews of skull base diseases. Only in this way will progress be made, treatment prescribed on the basis of the best possible evidence, and our patients spared the morbidity of ineffective and costly therapy. In time, this might encourage the design of randomized controlled trials of new adjuvant agents that would appeal to and help recruit our patients.

The Editorial Board of *Skull Base* has decided to take a lead on this initiative by commissioning and encouraging systematic reviews on topics that affect everyday skull base practice. These studies will be subject to very critical peer review and so help to form management guidelines for others to follow. “Adenoid cystic carcinoma of the nasal cavity and paranasal sinuses: a meta-analysis” is the first of these papers that will be published in the following months.