

Preface



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Guest Editors

The present issue of *Neurosurgery Clinics of North America* aims to summarize the rapidly growing range of neurosurgical techniques being utilized worldwide to reduce the impact of intracranial procedures on our patients. Given our belief in the utility of the endoscope in achieving this goal in many situations, many of the articles in this issue focus on endoscopic techniques; however, it is important to point out that not all minimally invasive brain surgeries utilize the endoscope.

However, more importantly, this issue aims to convey a philosophy that is true by definition: namely, that the best surgery for a given lesion is the one that involves the least exposure or manipulation of the brain, neural structures, or critical vessels, yet achieves the goals of surgery. There is widespread consensus in neurosurgery that brain retraction and unnecessary manipulation of the nerves is undesirable, and we believe that the natural extension of these conclusions is that any technique that can achieve the same goal with less brain retraction and neural manipulation is inherently better. What “the least exposure necessary” entails may vary between cases ranging from minimal exposures to more extensive craniotomies; however, the key is that the exposure should be tailored to the needs of the specific patient and be made as minimal as possible.

Being a vocal advocate of minimally invasive intracranial surgery inherently puts one in a position of being an advocate for change, and controversy is an inevitable companion of change. We would propose that given the self-evident advantages of less aggressive surgical approaches, the impressive ability for the nasal cavity to heal, and the potential visualization advantages provided by the endoscope that the arguments should

stop being about “traditional” vs “minimally invasive” approaches, or “microscope” vs “endoscope,” but instead should be “How do we make minimally invasive surgery work?” It is worth pointing out that the instrumentation, ergonomics, training paradigms, and operative techniques of microneurosurgery are in their mature form, having been refined over the past 50 years. In contrast, many of the approaches and techniques described in this issue are discussed by the surgeons who first pioneered these techniques, highlighting that minimally invasive neurosurgery is a relatively new discipline. The fact that such comparisons are felt worthy of discussion at this early time point along the technologic evolution of minimally invasive surgery, highlights the vast potential these techniques have to improve the care of our patients, and the importance of continued innovation.

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