

Introduction

Intractable pain

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The problem of surgical pain management remains one of the most daunting in our specialty. Traditionally, we divide the surgical approaches into the more historic destructive procedures (“ablative”) and the more contemporary modulatory ones (stimulation or intrathecal agents). The advent of “evidence-based medicine” has caused us to reanalyze the evidentiary basis of everything we do in neurosurgery, and pain procedures are no exception. What this has taught us is that the evidence to support destructive procedures is almost uniformly absent, although reanalysis using contemporary standards has shown that procedures, such as anterolateral cordotomy, may have a justifiable role in pain control, especially for pain associated with cancer. These same standards of evidence have also revealed weakness in the data supporting neuromodulation, particularly neurostimulation. There is some qualified support for spinal cord stimula-

tion based on reasonably conducted prospective trials, although even these studies are flawed. There is almost no indication that deep brain stimulation was ever effective for pain control, as indicated by a structured review using modern criteria. Peripheral nerve stimulation seems to be flourishing in pain centers worldwide, and yet the data to support this method for a variety of diagnoses are lacking.

We are currently in an era in which high-quality evidence to support our surgical endeavors will be increasingly important. With this evidence, it is likely that certain procedures, and perhaps whole fields, will disappear. Our hope is that this issue of *Neurosurgical Focus* will highlight some of the innovative work that is going on in our field and address some of the challenges of gathering and analyzing the data that will keep the area of pain surgery a vibrant and compelling practice for the future.

We are grateful to all of the authors for their contributions to this issue as well as the editors and staff of *Neurosurgical Focus* for their diligent efforts in support of this cause.

(<http://thejns.org/doi/abs/10.3171/2013.7.FOCUS13277>)

Disclosure

The authors report no conflict of interest.

Please include this information when citing this paper: DOI: 10.3171/2013.7.FOCUS13277.