Introduction

History of craniotomy, cranioplasty, and perioperative care

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It has defined who we are since the days of prehistory. It is the most “basic” of procedures, and yet without it and without doing it well, many suffer. The craniotomy has been the defining procedure for neurosurgeons, though it is not the most common procedure we do. The evolution of the craniotomy parallels the development of technology, the growth of our collective imagination, and our desire to provide maximum benefit with minimum risk and the smallest footprint. This issue brings to focus three major historical aspects of neurological surgery: the craniotomy, the cranioplasty, and the management of neurosurgical patients.

We have organized this issue of Neurosurgical Focus with a first section on how anesthesia and early osmolar therapy evolved and how they engaged the growing field of neurological surgery. Of course, the need to develop unique methods of hemostasis should not go unnoticed since achieving hemostasis in bone and brain brings unique challenges for surgeons.

The next section focuses on the development of unique methods for entering the skull, as described in the exhaustive overview written by Dr. Goodrich, and the specific rationale for developing unique approaches to the craniotomy. And, as important as the techniques, are the tools. In several articles, the tremendous effort to improve the technology for the craniotomy is represented in the description of the neurosurgical engine—the drill. A concomitant development was the brain retractor, and the how and why of this instrument in providing additional access in intracranial surgery is related as well.

The third and final section of this issue presents a fascinating look at the ingenious methods by which neurosurgeons have repaired the skull. Though cranioplasty is an afterthought to some, the articles contained herein depict the ingenuity of the many pioneers of this procedure.

Thus, the reader is immersed in a comprehensive look at the maturation of one of the cornerstones of neurological surgery. Understanding how we came to practice what to almost all of us is the “standard” and “routine” entering and exiting of the skull gives us an appreciation of the ingenuity and creative talents of our predecessors. We are given a privileged glimpse as to how necessity has engendered creativity, for that which in part defines us did not come easy to us.

Disclosure

The authors report no conflict of interest.

Please include this information when citing this paper: DOI: 10.3171/2014.2.FOCUS1470.