Why Study the Early History of Neurosurgery?

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HISTORY IS THE SYNTHESIS of societies’ experiences. It is not enough to simply chronicle events (which serves as a definition for “annals”); rather a narrative, a context for the events that transpired must be provided so as to gain an understanding of the events as they happened, and hopefully, to understand why the events took place. In so doing, one might better understand and appreciate the future.

Most people believe that neurosurgery is a relatively young field with a relatively brief history. Additionally, everyone in the field recognizes that neurosurgery today is vastly different from the neurosurgery practiced 20 or 30 years ago. Is it really so different?

The beginnings of neurosurgery are clearly evident as far back as the days of prehistory in the form of trephinations, the first operation performed by humans for which we have evidence. Although the techniques used to penetrate the skull then were quite different, the principles tend to remain the same. Those principles, born of experience and knowledge, are the common threads through the history of neurosurgery, and have defined the field long before neurosurgery was recognized as its own specialty. Through an understanding of the context in which neurosurgery as a field was born, we can understand why events took place as they did. The narrative of the history of neurological surgery begins long before the so-called “modern era” of our discipline.

Hence, in this issue we turn our attention back to the experiences and observations of past civilizations and explore the age before neurosurgery became a distinct discipline. The range of topics presented in this issue is intentionally broad so as to demonstrate the many areas and disciplines that have touched on and influenced neurological surgery. Insight into the centuries old debate concerning the nature of the mind and soul are presented, and the Eastern and Western theories of brain function are discussed. An anthropological analysis of the pathophysiological “evolution” of the human spine is included in this issue, and neurosurgery’s roots as they pertain to diseases of the brain and spine are reviewed through the writings of the ancient and medieval civilizations of Egypt, Babylonia, Greece, Rome, and the Middle East. The influence of the Mongolian Empire in the dissemination of knowledge in medicine and the neurosciences is also explored. Illustration has always been a critical element in disseminating medical and scientific knowledge. An interesting analysis of the influence of the 14th century neuroanatomical plates of Guido da Vigevano on future illustrators of neuroanatomy is elegantly presented. Finally, an intriguing analysis of “the history behind the history” of bone wax is described.

The articles assembled in this issue do not merely chronicle events: they tell a story about the origins of neurosurgery. These beginnings—these societies’ experiences—define our collective history. Knowing it and understanding it is part of who we are.