INTRODUCTION

Cranial surgery in geriatric patients

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THE world population of individuals over 65 years old is growing at a very rapid rate and many people are living longer. The 85-and-older population is the fastest-growing demographic and will represent 2% to 3% of the world population in 2030. Many of the conditions requiring neurosurgical treatment in younger patients may be experienced by geriatric or elderly patients, who are also at risk for many disorders unique to older adults. In addition, age-related changes in the physiology of the brain and the central nervous system (CNS), as well as non-CNS comorbidities and associated frailty, generate increased vulnerability, skew the severity of the underlying disease, and adversely affect expectations for response to treatment and resultant outcomes in geriatric patients. Demographic changes are forcing a new awareness of these characteristics of older patients, and the geriatric neurosurgery paradigm is evolving with regard to expectations and goals of care, patient engagement in care, medical ethics, and health economics.

The Topic Editors were very pleased to receive a record number of submissions of articles to consider for inclusion in this issue of *Neurosurgical Focus*, which we believe is a good indicator of the importance of the topic of neurosurgery in geriatric patients. We wish to acknowledge the additional support that Drs. Gelareh Zadeh and Christopher Farrell provided for the manuscript review process.

In this issue of *Neurosurgical Focus*, the Editors sought to present a comprehensive perspective of major neurosurgical issues with the focus on the geriatric patient cohort. In the opening editorial, by Schmidt et al., the authors propose that a new subspecialty of geriatric neurosurgery is evolving and discuss the perceived benefits associated with a gerontology-based approach when dealing with neuro-

surgical issues in the elderly. Hachem and Bernstein have provided an insightful overview of the sometimes complex ethical issues that are an important part of geriatric neurosurgical patient care. The next 3 papers traverse significant issues in the management of chronic subdural hematoma, including an important report by Joyce et al. that addresses middle meningeal embolization as an evolving treatment modality. There are 9 papers that tackle neuro-oncology and examine changes and challenges associated with the management of glioblastoma multiforme, meningioma, and pituitary adenoma in older patients. Burkhardt et al. report the exceptional experience of Robert Spetzler and Michael Lawton regarding the management of arteriovenous malformations in the geriatric patient. Three diverse papers examine the complex issues associated with the management of acute traumatic brain injury. Israelsson et al. share important findings regarding comorbidities, quality of life, and complications after surgery in patients with idiopathic normal pressure hydrocephalus. Lastly, Raygor et al. report their experience with surgical management of trigeminal neuralgia. The quality of the papers in this issue is outstanding, and we hope that you will both enjoy and be enlightened by the journey they offer.

<https://thejns.org/doi/abs/10.3171/2020.7.FOCUS20655>

Disclosures

Dr. Schmidt reports receiving clinical or research support from SOPHYSA.

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