Special Issue

Novel Techniques in Spine Neurosurgery

Message from the Guest Editors

Spinal neurosurgery has evolved significantly over the past decades, shifting from traditional open approaches to increasingly refined, minimally invasive, and patient-tailored techniques. This transformation has been driven by advancements in surgical instrumentation, spinal navigation, robotics, and endoscopy, as well as a deeper understanding of spinal biomechanics and neuroanatomy.

The aim of this Special Issue is to provide a comprehensive overview of the most recent innovations in spine neurosurgery, highlighting novel techniques that are reshaping clinical practice and improving patient outcomes. We invite contributions that explore both the technical and clinical aspects of these innovations, including their indications, limitations, and long-term results.

We are particularly interested in cutting-edge research on minimally invasive spinal surgery, spinal endoscopy, 3D navigation, robotics, augmented reality, biologics for spinal fusion, and neuromodulation for spinal pain. Comparative studies, technical notes, systematic reviews, and original research articles are welcome.

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You are invited to contribute a research article or a comprehensive review for consideration and publication in *Brain Sciences* (ISSN 2076-3425). *Brain Sciences* is an open access, peer-reviewed scientific journal that publishes original articles, critical reviews, research notes, and short communications on neuroscience. The scientific community and the general public can access the content free of charge as soon as it is published.

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