







Special Issue Reprint

Advanced Clinical Technologies in Treating Neurosurgical Diseases

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In this Special Issue of *Brain Sciences*, we offer a glimpse into the future of neurosurgery. Neurosurgery and clinical neuroscience are increasingly shaped by technological innovation, the refinement of therapeutic protocols, and the development of novel rehabilitative paradigms. Advances include adoption of 3D navigation to enhance surgical outcomes, the application of virtual iMRI, refinements in fluorescence-guided surgery, the emergence of new intraoperative neuroimaging techniques, robotic-assisted surgery, and the use of nanotechnology.

Looking ahead, the field will further integrate biomechanical engineering, computational neuroscience, advanced simulation-based education, and translational oncology. These emerging technologies will continue to transform the paradigms of diagnosis, intervention, and rehabilitation in neurosurgery.





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