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Nota di contenuto	Chapter 1. Cerebral stroke: An Introduction -- Chapter 2. Inflammation, oxidative stress, and neurodegeneration -- Chapter 3. Stroke induced blood brain barrier damage -- Chapter 4. Regulation of calcium ions in ischemic neuronal cell -- Chapter 5. Ischemic stroke induced endoplasmic reticulum stress -- Chapter 6. The role of autophagy in ischemic stroke: friend or foe?- Chapter 7. Critical role of mitochondrial autophagy in cerebral stroke -- Chapter 8. Application of neuroimaging in the identification of the pinpoint location of blockage -- Chapter 9. Emerging role of the electromagnetic field in stroke -- Chapter 10. Stemcell therapies for stroke -- Chapter 11. MicroRNA: Significance tostrokediagnosis, prognosis, and therapy -- Chapter 12. Therapeutic Aspects of Nanomedicines in Stroke Treatment --

Chapter 13. Neuroprotective potential of small molecule phytochemicals against stroke -- Chapter 14. Role of UV irradiation on neuroprotective potential of phytochemicals -- Chapter 15. Post-stroke treatment strategies, management, and rehabilitation.

Sommario/riassunto

This book provides detailed and comprehensive mechanistic insights of the various risk factors that lead to the ischemic stroke and the novel therapeutic interventions against it. The first section discusses the different ischemic cerebral stroke-induced inflammatory pathways and dysfunctionality of blood-brain barrier. The later sections of the book deals with the role of endoplasmic reticulum stress and mitophagy in cerebral stroke and introduces the different neuroimaging techniques such as Computed tomography (CT), Magnetic resonance imaging (MRI), Positron emission tomography (PET) and Single-Photon emission computed tomography (SPECT) that are used to identify the arterial blockages. The final section comprises of chapters that focus on various neuroprotective strategies and emerging therapeutic interventions for combating stroke pathophysiology. The chapters cover the role of stem cell therapy, the therapeutic effect of low-frequency electromagnetic radiations (LF-EMR), and implications of non-coding RNAs such as micro-RNAs as the biomarkers for diagnosis, prognosis, and therapy in ischemic stroke.