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Nota di contenuto	Road Map for the Pathogenesis of Glaucomatous Optic neuropathy -- Intracranial & Intraocular Pressure Related Diseases -- Optic nerve sheaths fenestration, a way to balance the trans-lamina cribrosa pressure differentials? -- Anatomy and physiology in lamina cribrosa -- The New Concepts of Cerebrospinal Fluid Physiology -- Cerebrospinal Fluid Pressure Dynamics and the Pulsatile Component of the Translaminar Pressure Gradient -- CSF circulation in the subarachnoid space surrounding the optic nerve -- Facts and myths of cerebrospinal fluid pressure for the physiology of the eye -- Energy theory in glaucoma -- Measurement Techniques Relevant to Intracranial and Intraocular Pressure Gradient -- Imaging of Optic Nerve Subarachnoid Space, the Best Sequence? -- Measurement and Associations of the Optic Nerve Subarachnoid Space in Normal Tension and Primary Open Angle Glaucoma -- Translaminar pressure difference related animal models -- Fortified Astrocyte: the Target of Pathological Intraocular Hypertension -- Lymphatic Drainage from the Eye: Is Cerebrospinal Fluid Involved? -- Response of the rat optic nerve to acute intraocular & intracranial pressure changes -- The Optic Nerve Chamber Syndrome -- The Molecular Basis of Retinal Ganglion Cell Death in Glaucoma -- The mechanism of trans-lamina cribrosa pressure difference activate mechanical stress signal transduction to induced optic nerve damage-a hypothesis -- Impact of intraocular pressure on optic nerve head deformation -- Push Me Pull You -- Aging effect on Lamina Cribrosa Depth in Ocular Hypertension and

Glaucoma -- The importance of habitual 24-hour IOP measurement -- Intracranial hypotension and coexistent normal-pressure glaucoma, Five years follow-up -- Acute Peripapillary Retinal Pigment Epithelium Changes Associated with Acute IOP Elevation -- The Relationship between Cerebrospinal Fluid Pressure and Blood Flow in the Retina and Optic Nerve -- New Insights into Ocular Hypertension -- Correlation among intraocular pressure, intracranial pressure and blood pressure -- How to Define a Glaucomatous Optic Neuropathy? -- Pressure Difference and Ocular Morphology Change, From Biomechanical Analysis -- Biomechanical Mechanisms of IOP/CSFP-induced optic nerve damage -- Dietary nitrate intake and primary open angle glaucoma -- Body mass index and open angle glaucoma -- Normal Tension Glaucoma —A “Qi deficiency” disease -- Visual Impairment in Astronauts after Long-Duration Spaceflight, a Chapter 36 Backward of Glaucomatous Optic Neuropathy? -- Genetic insights into primary open-angle glaucoma -- Alzheimer’s disease, intracranial pressure, glaucoma -- Surgical Management Strategies for Pseudotumor Cerebri/Idiopathic Intracranial Hypertension -- Idiopathic intracranial hypertension.

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### Sommario/riassunto

This book focuses on the characteristic of glaucomatous optic neuropathy and its relationship with cerebrospinal fluid (CSF) pressure. It also explores the potential novel methods to manage glaucoma by adjusting CSF pressure. This book covers several interesting topics such as why normal tension glaucoma (NTG) patients still develops into glaucoma without high intraocular pressure (IOP); and whether there are factors other than IOP contributing to the pathogenesis of NTG why the role of IOP in the pathogenesis of POAG becomes vague and controversial. This book contains over 40 chapters, including numerous images from clinical patients and experiments on gross anatomy, pathological tissue, and immunohistochemistry, electronic speculum etc. The ophthalmologists and researchers can also benefit from the clinical cases. We hope this book serves as a clinical guidance with practical significant for the understanding, prevention and diagnosis of glaucoma.

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