JAPANESE JOURNAL OF NEUROSURGERY
VOL. 20 NO. 8 August 2011

Editor-in-chief: Susumu MIYAMOTO
Co-editor: Hiroyuki KINOUCHI
Editorial Board:
Hajime ARAI Koji IHIRA Koichi IWATSUKI
Kuniaki OGASAWARA Yoichi KATAYAMA Nobuhito SAITO Hiroki SHIMIZU
Tadahisa SHONO Kazuhiko SUGIYAMA Michiyasu SUZUKI Takaomi Taira
Isao DATE Koji TOKUNAGA Atsushi TOMINAGA Teiji TOMINAGA
Yoshihiro NATORI Nakamasa HAYASHI Yuichi HIROSE Chikashi FUKAYA
Yuji MATSUMARU Nobuhiro MIKUNI Yoshihiro MURAGAKI Shinichi YOSHIMURA

CONTENTS

SPECIAL ISSUES／Neuroscience for the Development of Neurosurgery in the Near Future

*1 A New Role for Astrocytes
Editor-in-charge: Isao Date, Hiroyuki Kinouchi
Schuichi Koizumi 552

*2 Oxidative Stress and Mitochondrial Dysfunction in Neurovascular Injury after Stroke
Hideyuki Yoshioka, et al 559

*3 Ischemic Tolerance in the Brain: Recent Advances in Basic Research
Kazuo Kitagawa 566

*4 Future Prospective of Stem Cell Therapy for Stroke
Osamu Honmou 574

*5 Prospect of Regenerative Medicine for Spinal Cord Injury
Koichi Iwatsuki 580

*6 Advances in Induced Pluripotent Stem Cell Therapy for Neurological Diseases
Toru Yamashita, et al 585

*7 Regenerative Therapy using Neural Stem Cells—The History and Now—
Yasushi Takagi, et al 589

ORIGINAL ARTICLES

Endovascular Treatment of Radiation-induced Carotid Blowout Syndrome: Report of Two Cases
Akihiko Adachi, et al 597

SURGICAL TECHNIQUES and PERIOPERATIVE MANAGEMENT

Femoral-internal Carotid Extraluminal Shunt for Carotid Surgery
Masanori Yoshino, et al 604

NEUROIMAGING and NEUROPATHOLOGY of BRAIN TUMORS

Asymptomatic Brain Tumor in the Medulla Oblongata
Sadahiro Kaneko, et al 612

Article Presented at the 30th Annual Meeting of the Japanese Congress of Neurological Surgeons: *1“Neuroscience Developing Future of Neurosurgery”, *2“Neuroscience for the Treatment of Cerebral Ischemia”, *3“Regenerative Medicine”

Official Journal of the Japanese Congress of Neurological Surgeons

THE JAPANESE CONGRESS OF NEUROLOGICAL SURGEONS

Department of Neurosurgery, Juntendo University School of Medicine, 2-1-1 Hongo, Bunkyo-ku, Tokyo 113-8421, Japan

Jpn J Neurosurg. VOL. 20 NO. 8 2011. 8 549

NII-Electronic Library Service