

Profile of Minoru Tomita, The 21st Mihara Prize Winner

Visiting Prof. Dr. Minoru Tomita
Department of Neurology, Keio University School of Medicine, Tokyo

Education and Professional History

- 1959 Graduation from School of Medicine, Keio University, Tokyo
- 1962 Wayne State University, Unit of Cerebrovascular Disease
(Head: Prof. Meyer)
- 1963 Department of Neurology, School of Medicine, Keio University
(Head: Prof. Gotoh)
- 1970 Director of Tomita Hospital, Okazaki
Visiting Researcher of Department of Neurology, School of Medicine,
Keio University
- 1988-1992 Visiting Researcher of National Institute of Physiology
Visiting Assistant Prof. Miyazaki Medical College
- 1995 Visiting Prof. Dept. of Neurol., School of Medicine,
Keio University

Members

- Stroke Council of American Heart Association
- New York Academy of Science (AAAS#00443549)
- Member of Cereb Blood Flow Metabol
(Director: Chairman of Membership Committee (1994-96))
- Director of Japanese Society of Cereb Blood Flow Metabol
- Honorary Member of Hungarian Society of Stroke (1996)

Award

- Highest Award for Medical Scientist from Japanese Medical Association
(1995)

International Symposia

- Int. Sympo. "Cerebral Hyperemia and Ischemia", President, 1987, Osaka
- Int. Sympo. "Microcirculatory Stasis in the Brain", President, 1993, Tokyo
- Int. Sympo. "Ischemia, Cytokines, and Cellular Mobilization in the Brain",
Organizer, 1996, Tokyo
- Int. Sympo. "Ischemic Blood Flow in the Brain", Organizer, 1999, Tokyo
- Program Committee for 20th International Symposium on Cerebral Blood Flow
and Metabolism (Brain 01, Taipei, June 10-13, 2001)

Bibliography

Contents

Books

Original Articles

I: Related to Circulation Physiology including Methodology

II: Related to Cerebrovascular Disease

III: Related to Brain Edema

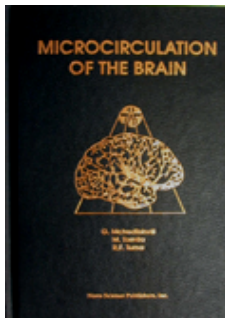
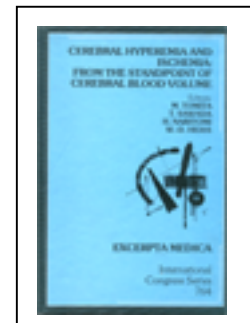
IV: Related to Haemorheology and RBC Aggregation

V: Related to Cultured Cells including Neurons, Astroglia, and Microglia, and Blood Cells such as Polymorpholeukocytes, Monocytes and Platelets

VI: Articles before 1970

Books

1. Proceedings: Cerebral Hyperemia and ischemia - From the Standpoint of Cerebral Blood Volume, Tomita M, Sawada T, Naritomi H, Heiss WD, eds.: Int. Natl. Congr. Ser. 764, Excerpta Medica, Amsterdam, 1988



2. Proceedings: Microcirculation of the Brain, Mchedlishvili G, Tomita M, Tuma RF, eds., Nova Science Publ. Inc., New York, 1992

3. Proceedings : Microcirculatory Stasis in the Brain, Tomita M, Mchedlishvili G, Rosenblum WI, Heiss W-D, Fukuuchi Y, eds., Int. Natl. Congr. Ser. 764, Excerpta Medica, Amsterdam, 1993



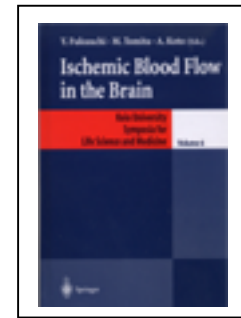
4. Proceedings: Ischemia, Cytokines and Cellular Mobilization in the Brain, Fukuuchi Y, Tomita M, eds., Keio J. Med. 45: 174-274, 1996

5. Proceedings: RBC Aggregation and Stroke (Abstracts), Tomita M, Fukuuchi Y eds., at Joint 3rd World Congress and 5th European Microcirculation, Rome, 1996

6. Proceedings: Chemical and neural control of the cerebral circulation, at Brain 99, Copenhagen, June, 2000, Regulation of cerebral microcirculation: update. Tomita, N. Suzuki, E. Hamel, D. Busija, M. Lauritzen: Keio J. Med.; 49(1):26-34, 2000

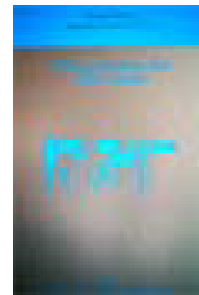


7. Proceedings: Ischemic Blood Flow in the Brain, Fukuuchi Y, Tomita M, Koto A, eds., Springer, Tokyo-Berlin-Heidelberg, 1999



8. Proceedings: Hemorheology in Microcirculation: Pathological Changes, Internet Virtual Symposium, The 7th Tbilisi Symposium, Mchedlishvili G, Tomita M, Schmid-Schönbein eds., Keio J Med 49 (Suppl 3), 2000

9. Proceedings: Brain Activation and CBF Control, Tomita M, Kanno I, Hamel Edith eds., Excerpta Medica, Elsevier Science BV, ICS 1235, 200



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New Original Articles after the Mihara Prize as of End of 2006

Tomita M, Ohtomo M, Suzuki N: Contribution of the flow effect caused by shear-dependent RBC aggregation to NIRS spectroscopic signals. *NeuroImage* 33:1-10, 2006.

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Tomita M, Tanahashi N, Takeda H, Schiszler I, Osada T, Unekawa M, Suzuki N. Capillo-venous flow in the brain: significance of intravascular RBC aggregation for venous flow regulation. *Clinical Hemorheology and Microcirculation*. 34: 51-57, 2006.

Osada T, Tomita M, Suzuki N. Spindle-shaped constriction and propagated dilation of arterioles during cortical spreading depression. *Neuroreport*.17:1365-8, 2006.

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Tomita M: Increased intracranial pressure and brain edema. In *ISN Book Series, Pathology & Genetics, Structure and functions of CNS blood vessels, Cerebrovascular Diseases, Chapter 5*, edited by Hannu Kalimo, (2005) pp39-49.

Tomita M, Tanahashi N, Takeda H, Takao M, Tomita Y, Amano T, Fukuuchi Y. Astroglial swelling in the neuronal depolarization ensemble. *Acta Neurochir* 86: 219-222, 2003.

Inoue K, Tomita M, Fukuuchi Y, Tanahashi N, Kobari M, Takao M, Takeda H, Yokoyama M. Dynamic observation of oxygenation-induced contraction of and transient fiber-network formation/disassembly in cultured human brain microvascular endothelial cells. *J Cereb Blood Flow Metab*. 23 (7), 821-828, 2003.

Tomita Y, Tomita M, Schiszler I, Amano T, Tanahashi N, Kobari M, Takeda H, Ohtomo M, Repetitive concentric wave-ring spread of oligemia/hyperemia in the sensorimotor cortex accompanying K⁽⁺⁾-induced spreading depression in rats and cats. *Neurosci Lett*. 322(3):157-60, 2002.

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