

主な研究課題・発表代表論文

脳神経外科学講座 Neurosurgery

研究領域 脳・神経病態制御医学

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主な研究課題

- ・脳卒中診療における遠隔医療システムの開発
- ・クモ膜下出血における遅発性脳虚血と皮質拡延性抑制の研究
- ・脳血管の特殊性に関する分子学のおよび解剖・生理学的探究
- ・てんかん、脳卒中、頭部外傷における温度受容機構の解明
- ・glymphatic pathwayの解明
- ・脳梗塞に対する細胞治療

発表代表論文

1. Hideyuki Ishihara , Takuma Nishimoto, Mototsugu Shimokawa, Fumiaki Oka, Nobuyuki Sakai, Hiroshi Yamagami, Kazunori Toyoda, Yuji Matsumaru, Yasushi Matsumoto, Kazumi Kimura, Reiichi Ishikura, Manabu Inoue, Kazutaka Uchida, Fumihiko Sakakibara, Takeshi Morimoto, Shinichi Yoshimura and for the RESCUE Japan LIMIT Investigators. Association of Time Course of Thrombectomy and Outcomes for Large Acute Ischemic Region: RESCUE–Japan LIMIT Subanalysis. Stroke: Vascular and Interventional Neurology. 2023 | Volume 3, Issue 5: e000880, originally published July 24, 2023, <https://doi.org/10.1161/SVIN.123.000880>
2. Oka F, Sadeghian H, Yaseen MA, Fu B, Kura S, Qin T, Sakadžić S, Sugimoto K, Inoue T, Ishihara H, Nomura S, Suzuki M, Ayata C. Intracranial pressure spikes trigger spreading depolarizations. Brain. 2022 Mar 29;145(1):194-207.
3. Nishimoto T, Oka F, Okazaki K, Ishihara H. Timing of Direct Oral Anticoagulants for Hemorrhagic Transformation After Endovascular Treatment in Acute Ischemic Stroke. J Stroke Cerebrovasc Dis. 2022 Jul;31(7):106507.
4. Nomura S, Haji K, Fujiyama Y, Nishimoto T, Oka F, Ishihara H. Endoscopically observed outer membrane of chronic subdural hematoma after endovascular embolization of middle meningeal artery. Surg Neurol Int. 2022 Nov 11;13:516.
5. Sakai N, Takeuchi M, Imamura H, Shimamura N, Yoshimura S, Naito H, Kimura N, Masuo O, Hirotsune N, Morita K, Toyoda K, Yamagami H, Ishihara H, Nakatsu T, Miyoshi N, Suda M, Fujimoto S. Safety, Pharmacokinetics and Pharmacodynamics of

- DS-1040, in Combination with Thrombectomy, in Japanese Patients with Acute Ischemic Stroke. *Clin Drug Investig.* 2022 Feb;42(2):137-149.
6. Nishimoto T, Oka F, Okazaki K, Ishihara H. Relationship between cerebral hyperperfusion syndrome and the immediate change of cerebral blood flow after carotid artery stenting evaluated by single-photon emission computed tomography. *Neuroradiology.* 2022 Jun;64(6):1157-1164.
 7. Uchida K, Shindo S, Yoshimura S, Toyoda K, Sakai N, Yamagami H, Matsumaru Y, Matsumoto Y, Kimura K, Ishikura R, Yoshida A, Inoue M, Beppu M, Sakakibara F, Shirakawa M, Morimoto T; RESCUE-Japan LIMIT Investigators. Association Between Alberta Stroke Program Early Computed Tomography Score and Efficacy and Safety Outcomes With Endovascular Therapy in Patients With Stroke From Large-Vessel Occlusion: A Secondary Analysis of the Recovery by Endovascular Salvage for Cerebral Ultra-acute Embolism-Japan Large Ischemic Core Trial (RESCUE-Japan LIMIT). *JAMA Neurol.* 2022 Dec 1;79(12):1260-1266.
 8. Moriyama H, Nomura S, Imoto H, Inoue T, Fujiyama Y, Haji K, Maruta Y, Ishihara H, Suzuki M. Suppressive Effects of Transient Receptor Potential Melastatin 8 Agonist on Epileptiform Discharges and Epileptic Seizures. *Front Pharmacol.* 2021 Oct 1;12:766782.
 9. Kawano A. Association Between Spreading Depolarization and Delayed Cerebral Ischemia After Subarachnoid Hemorrhage: Post Hoc Analysis of a Randomized Trial of the Effect of Cilostazol on Delayed Cerebral Ischemia. *Neurocrit Care.* 2021 35(Suppl 2):91-99.
 10. Oka F. Intracranial pressure spikes trigger spreading depolarizations. *Brain.* 2021; in press.
 11. Sugimoto K. Peri-Infarct Hot-Zones Have Higher Susceptibility to Optogenetic Functional Activation-Induced Spreading Depolarizations. *Stroke.* 2020;51(8):2526-35.
 12. Nishimoto T. Cerebral hemodynamics associated with fluid-attenuated inversion recovery hyperintense vessels in patients with extracranial carotid artery stenosis. *Neuroradiology.* 2020;62(6):677-84.
 13. Ishihara H. Hounsfield Unit Value of Interpeduncular Cistern Hematomas Can Predict Symptomatic Vasospasm. *Stroke.* 2020 Jan;51(1):143-148.
 14. Ishihara H. Impact of Frailty on Medium-Term Outcome in Asymptomatic Patients After Carotid Artery Stenting. *World Neurosurg.* 2019 Jul ; 127 : e396-e399.
 15. Moriyama H. Suppressive Effects of Cooling Compounds Icilin on Penicillin G-Induced Epileptiform Discharges in Anesthetized Rats. *Front Pharmacol.* 2019 Jun 13 ; 10 : 652.
 16. Oka F. Delayed Cerebral Ischemia After Subarachnoid Hemorrhage : Experimental-Clinical Disconnect and the Unmet Need. *Neurocrit Care.* 2020 Feb;32(1):238-251.
 17. Sugimoto K. Cilostazol decreases duration of spreading depolarization and spreading ischemia after aneurysmal subarachnoid hemorrhage. *Ann Neurol.* 2018 Dec;84(6):873-885
 18. Nomura S. Reduction of spike generation frequency by cooling in brain slices from rats and from patients with epilepsy. *J Cereb Blood Flow Metab.* 2019 Nov;39(11):2286-2294.
 19. Sadahiro H. Activation of the Receptor Tyrosine Kinase AXL Regulates the Immune

Microenvironment in Glioblastoma. *Cancer Res.* 2018 Jun 1;78(11):3002-3013.