脳神経外科学分野

Ⅰ　研究組織（構成員　平成26年3月31日現在）

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Ⅱ　研究活動

【基礎研究】

1. オートファジーに注目した悪性神経膠腫に対する新たな治療法の展開
2. MGMT 活性、IDH1 mutation の解析に基づく悪性神経膠腫の病態研究
3. フラビン蛍光イメージングを用いたてんかん発作発生機序の解明
4. ラット脳幹グリオーマモデルに対する CED(convection-enhanced delivery)法に関する研究
5. 先進的３次元工学を利用した脳神経外科手術シミュレーション／トレーニングシステムの開発・臨床応用
6. Multi-parametric MRI を用いた虚血性脳血管障害の病態解析
7. Neuromodulation を用いた感覚運動野皮質における機能代償機転の解明－fMRI を用いた研究
8. 近赤外分光法を用いた術前機能評価、てんかん焦点の病態解析

【臨床研究】

1. 悪性神経膠腫
2. 間脳・下垂体腫瘍
3. 小児脳腫瘍、先天奇形
4. 頭蓋底腫瘍
5. 機能性疾患
6. 虚血性脳血管障害
7. 脳動脈瘤、脳動静脈奇形
8. 脊椎・脊髄疾患

Ⅲ　論文（原著、総説、症例報告を区別しない）

(1) Hiraishi T, Fukuda M, Oishi M, Fujii Y. Facial nerve dysfunction after drainage of cerebrospinal fluid during vestibular schwannoma surgery. Clin Neurol Neurosurg 115(1):102-5, 2013

(2) Jinguji S, Okamoto K, Yoshimura J, Yoneoka Y, Ogura R, Saito A, Fujii Y. Occurrence of metachronous pure germinomas long after treatment of a mixed germ cell tumor containing yolk sac tumor and germinoma. J Neurosurg Pediatr 11(1):68-73, 2013

(3) Jinguji S, Nishiyama K, Yoshimura J, Yoneoka Y, Harada A, Sano M, Fujii Y. Endoscopic biopsies of lesions associated with a thickened pituitary stalk. Acta Neurochir (Wien) 155(1):119-24, 2013

(4) Hiraishi T, Kitaura H, Oishi M, Fukuda M, Kameyama S, Takahashi H, Kakita A, Fujii Y. Significance of horizontal propagation of synchronized activities in human epileptic neocortex investigated by optical imaging and immunohistological study. Epilepsy Res. 2013 Mar;104(1-2):59-67

(5) Jinguji S, Yoshimura J, Nishiyama K, Aoki H, Nagasaki K, Natsumeda M, Yoneoka Y, Fukuda M, Fujii Y. Factors affecting functional outcomes in long-term survivors of intracranial germinomas: a 20-year experience in a single institution. J Neurosurg Pediatr 11(4):454-63, 2013

(6) Jinguji S, Fukuda M, Nagasaki K, Fujii Y. A pineal region germ cell tumor with rapid enlargement after a long-term follow-up: case report. Neurosurgery 72(4):E687-93, 2013

(7) Kitazawa K, Sorimachi T, Ito Y, Fujii Y. A carving method to determine an optimal working projection using three-dimensional volume rendering digital subtraction angiography in coil embolization of cerebral aneurysms. J Neurointerv Surg 5(3):253-7, 2013

(8) Yoneoka Y, Watanabe N, Okada M, Fujii Y. Observation of the neurohypophysis, pituitary stalk, and adenohypophysis during endoscopic pituitary surgery: demonstrative findings as clues to pituitary-conserving surgery. Acta Neurochir (Wien) 155(6):1049-55, 2013

(9) Fukuda M, Takao T, Hiraishi T, Yajima N, Saito A, Fujii Y. Novel devices for intraoperative monitoring of glossopharyngeal and vagus nerves during skull base surgery. Surg Neurol Int 25(4):97, 2013

(10) Oishi M, Fukuda M, Yajima N, Yoshida K, Takahashi M, Hiraishi T, Takao T, Saito A, Fujii Y. Interactive presurgical simulation applying advanced 3D imaging and modeling techniques for skull base and deep tumors. J Neurosurg 119(1):94-105, 2013

(11) Sato Y, Fukuda M, Oishi M, Shirasawa A, Fujii Y. Ictal near-infrared spectroscopy and electrocorticography study of supplementary motor area seizures. J Biomed Opt 18(7):76022, 2013

(12) Ogura R, Aoki H, Natsumeda M, Shimizu H, Kobayashi T, Saito T, Takizawa J, Okamoto K, Hasegawa G, Umezu H, Ohshima K, Takahashi H, Fujii Y, Kakita A. Epstein-Barr virus-associated primary central nervous system cytotoxic T-cell lymphoma. Neuropathology 33(4):436-41, 2013

(13) Hiraishi T, Matsushima T, Kawashima M, Nakahara Y, Takahashi Y, Ito H, Oishi M, Fujii Y. 3D Computer graphics simulation to obtain optimal surgical exposure during microvascular decompression of the glossopharyngeal nerve. Neurosurg Rev 36(4):629-35, 2013

(14) Aoki H, Ogura R, Tsukamoto Y, Okada M, Natsumeda M, Isogawa M, Yoshida S, Fujii Y. Advantages of dose-dense methotrexate protocol for primary central nervous system lymphoma: comparison of two different protocols at a single institution. Neurol Med Chir (Tokyo) 53(11):797-804, 2013

(15) Kon T, Natsumeda M, Takahashi H, Taki T, Fujii Y, Ryuya Y. Radiation-Induced Glioblastoma Following Radiotherapy for Pituitary Adenomas: Marked Response to Chemotherapy. J Neurol Neurophysiol 4:3, 2013

(16) Nishiyama K, Natori Y, Oka K. A novel three-dimentional and high-definition flexible scope. Acta Neurochir(Wien) 2013

Ⅳ　共同研究

中枢神経原発悪性リンパ腫のマイクロRNA発現解析

新潟大学脳研究所　京都府立医科大学　千葉大学　山口大学