Editor’s column

847 Do we need CT perfusion for stroke patients? Define your terms
J Fiehler

Commentaries

849 Cerebral venous thrombosis after COVID-19 vaccination: the role for endovascular treatment
A Mahajan, J A Hirsch

851 Cerebrospinal fluid disorders and shunts: it’s time to move forward. Invited commentary on First-in-human endovascular treatment of hydrocephalus with a miniature biomimetic trans-dural shunt
K M Fargen, D E Couture

The pandemic and interventional neurosurgery

853 Endovascular treatment for vaccine-induced cerebral venous sinus thrombosis and thrombocytopenia following ChAdOx1 nCoV-19 vaccination: a report of three cases

858 Mechanical thrombectomy for acute ischemic stroke in COVID-19 patients: multicenter experience in 111 cases

Ischemic stroke

863 Addition of intracranial aspiration to balloon guide catheter does not improve outcomes in large vessel occlusion anterior circulation stent retriever based thrombectomy for acute stroke

868 Non-contrast head CT alone for thrombectomy in acute ischemic stroke: analysis of the ANGEL-ACT registry
Z Ren, G Ma, M Mokin, A P Jadhav, B Jia, X Yong, C Bauer, R Liu, A Wang, X Zhang, D Mo, N Ma, F Gao, L Song, X Sun, X Huo, Y Deng, L Liu, G Luo, X Luo, Y Peng, I Gai, C Song, J Wu, Y Wang, C Li, T G Jovin, Y Wang, W Yan, Z Miao, on behalf of ANGEL-ACT Study Group

875 Unexplained early neurological deterioration after endovascular treatment for acute large vessel occlusion: incidence, predictors, and clinical impact: Data from ANGEL-ACT registry
D Sun, X Tong, X Huo, B Jia, R A Wang, G Ma, N Ma, F Gao, D Mo, L Song, X Sun, L Liu, Y Deng, X LL, B Wang, G Luo, Y Wang, Z Miao, on behalf of ANGEL-ACT study group

881 Predictors of futile recanalization after endovascular treatment in acute ischemic stroke: a meta-analysis
G Deng, J Xiao, H Yu, M Chen, K Shang, C Qin, D-S Tian

886 Predictors and clinical impact of infarct progression rate in the ESCAPE-NA1 trial

892 Efficacy of combined use of a stent retriever and aspiration catheter in mechanical thrombectomy for acute ischemic stroke
T Okuda, K Arimura, R Matsuo, S Tokunaga, K Haru, S Yamaguchi, H Yoshida, R Kurogi, K Kameda, O Ho, T Tsumato, K Ishara, T Mizokami, T Uwatoko, A Nishimura, K Iwaki, M Mrozuschi, QNET investigators

More contents ▶
Hemorrhagic stroke
898 Diversion-p64: results from an international, prospective, multicenter, single-arm post-market study to assess the safety and effectiveness of the p64 flow modulation device
A Bonafe, M A Perez, H Henkes, P Lylyk, C Béliese, G Gascon, S Strakov, A Strakov, L Stoeck, F Turjeman, A Petrov, C Roth, A-P Nanata, X Barrau, C Loehr, A Berdis, L Pierce, M Mib, T Godard, A Clifton, J Klosch, C Walter, M Dall’Ollo, L Spelle, F Clarencan, S Yakovlev, P Keston, N P Nuzzi, S Dimu, C Wendt, T Willems, P Schramm

904 Intracranial aneurysm treatment with intrasaccular flow disruption: comparison of WEB-21 and WEB-17 systems
P Pagano, L Paiusan, S Soize, L Pierot

Clinical neurology
910 Cerebral neurovascular embryology, anatomic variations, and congenital brain arteriovenous lesions
J M Klostranec, T Krings

920 Stent-assisted coiling of dural sinus diverticula: a case series
S R Keshary, T Everett, A M Alvarado, M G Abraham

Neuroimaging
925 Non-ischemic cerebral enhancing lesions after intracranial aneurysm endovascular repair: a retrospective French national registry

Spine
931 Use of the SpineJack direct reduction for treating type A2, A3 and A4 fractures of the thoracolumbar spine: a retrospective case series
G Lofrese, L Ricciardi, P De Bonis, F Caltrera, M Cappuccio, A Scenati, A Marucci, A Musio, L Tosatto, F De Iure

938 Comparison of the clinical outcomes of percutaneous kyphoplasty for the management of osteolytic and osteoblastic-related metastatic vertebral lesions
W Wu, X Zhang, X Li, H Liu, L Xu, T Liu, S Yu

Socioeconomics
942 Cost-effectiveness analysis of endovascular coiling and neurosurgical clipping for aneurysmal subarachnoid hemorrhage in Thailand
P Duangthongphon, A Kikha, A Munkong, P Limwattananon, O Waleekhachonloet, T Rattanachotphanit, S Limwattananon

Technical video
948 Transvenous embolization of a cerebrospinal fluid–venous fistula for the treatment of spontaneous intracranial hypotension
N Borg, S Ousby, I. Savastano, W Brinjikji