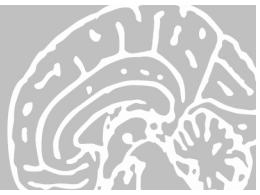
Current Stroke Management in Japan: The SAMURAI Registries



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To reveal the current ischemic stroke management in Japan, we conducted the Stroke Acute Management with Urgent Risk-Factor Assessment and Improvement (SAMURAI) rt-PA registry and now carry on the SAMURAI-NVAF study.

Since 2005, we use alteplase at 0.6mg/kg for intravenous rt-PA therapy to treat patients with acute ischemic stroke. The SAMURAI rt-PA registry showed similar 3-month outcomes to those of controlled trials and post marketing registries using alteplase at 0.9mg/kg. In this study, pretreatment diffusion weighted imaging-Alberta Stroke Program Early Computed Tomography Score (DWI-ASPECTS), a semi-quantitative score to assess early ischemic change, was independently associated with patients with favorable outcome and death at 3 months, as well as those with symptomatic intracerebral hemorrhage within 36 hours following rt-PA therapy. Recently we basically add endovascular thrombectomy in patients with a proximal intracranial artery occlusion and NIHSS of $\geq$ 8 points who are resistant to intravenous rt-PA therapy at our stroke center. Very recent 4 RCTs (MR CLEAN, ESCAPE, EXTEND-IA and SWIFT PRIME) revealed the efficacy and safety of the endovascular thrombectomy.

The ongoing SAMURAI-NVAF study is a multicenter, observational study to evaluate the choice of oral anticoagulants at acute hospital discharge and short- and long-term outcomes in ischemic stroke/TIA patients with nonvalvular atrial fibrillation. Warfarin use at acute hospital discharge was still common in the initial years after approval of nonvitamin K antagonist oral anticoagulants (NOAC), although NOAC users increased gradually. The index stroke was milder and ischemia-risk indices were lower in NOAC users than in warfarin users. Early initiation of NOAC seemed safe. At 3 months after initiating oral anticoagulants, the incidence rates of ischemic events were 3% in NOAC users and 4% in warfarin users and those of major bleeding events were 2% and 3.6%, respectively. Enrolled ischemic stroke/TIA patients will be followed-up for 2 years to assess long-term outcome.