SAN DIEGO (April 15, 2019) — Winner of the Cerebrovascular Section Best Clinical Scientific Paper, Ching-Jen Chen, MD, presented his research, Stereotactic Radiosurgery for Pediatric versus Adult Brain Arteriovenous Malformations: A Multicenter Study, during the 2019 American Association of Neurological Surgeons (AANS) Annual Scientific Meeting.

The aim of this international, multicenter, retrospective, matched-cohort study is to directly compare the outcomes after stereotactic radiosurgery (SRS) for brain arteriovenous malformations (AVM) in pediatric vs. adult patients.

Researchers performed a retrospective review of AVM patients who underwent SRS at eight institutions participating in the International Gamma Knife Research Foundation (IGKRF) from 1987-2014. Patients were categorized into pediatric (<18 years old) and adult (≥18 years old) cohorts, and matched in a 1:1 ratio using propensity scores. Favorable outcome was defined as AVM obliteration, no post-SRS hemorrhage and no permanently symptomatic radiation-induced changes (RIC).

The outcomes following SRS for comparable AVMs in pediatric versus adult patients were not found to be appreciably different. SRS remains a reasonable treatment option for appropriately selected pediatric AVM patients who harbor a high cumulative lifetime hemorrhage risk. Age appears to be a poor predictor of AVM outcomes after SRS.

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About the 2019 AANS Annual Scientific Meeting: Attended by neurosurgeons, neurosurgical residents, medical students, neuroscience nurses, clinical specialists, physician assistants, allied health professionals and other medical professionals, the AANS Annual Scientific Meeting is the largest gathering of neurosurgeons in the nation, with an emphasis on the field’s latest research and technological advances. The scientific presentations accepted for the 2019 event will represent cutting-edge examples of the incredible developments taking place within the field of neurosurgery. Find additional information about the 2019 AANS Annual Scientific Meeting and the meeting program here.
Board of Neurological Surgery, the Royal College of Physicians and Surgeons of Canada or the Mexican Council of Neurological Surgery, A.C. Neurosurgery is the medical specialty concerned with the prevention, diagnosis, treatment and rehabilitation of disorders that affect the spinal column, spinal cord, brain, nervous system and peripheral nerves.

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