showed that treatment with Solitaire plus IV tPA was beneficial compared with IV tPA alone regardless of all evaluated characteristics, including sex, age, occlusion location, time to randomization, and site of care.

Successful reperfusion (≥90%) at 27 hours was achieved in 82.8% of patients in the Solitaire plus IV tPA arm vs 40.4% in the IV tPA arm (*P* < .0001). Also, the mean improvement on the National Institutes of Health Stroke Scale score at 27 hours was 8.5 in the Solitaire plus IV tPA arm vs 3.9 with IV tPA alone (*P* < .0001).

The safety analysis demonstrated that the complication rate with the Solitaire stent in combination with IV tPA was exceedingly low and its use was safe when compared with IV tPA treatment alone.

Dr Saver concluded that patients with acute ischemic stroke due to large vessel occlusions in anterior circulation significantly benefited from rapid endovascular treatment with the Solitaire stent retriever. Its use was shown to be technically successful, safe, and effective at improving patients' disability levels 3 months after stroke.

Close Adherence to Mediterranean Diet Reduces Stroke Risk in Women

Written by Wayne Kuznar

Adhering closely to a Mediterranean dietary pattern reduces the risk of stroke in women. Ayesha Sherzai, MD, Columbia University, New York, New York, USA, presented results from a subset analysis of the California Teachers Study.

In a scientific advisory, a healthy diet, particularly a Mediterranean diet, was heralded by the American Heart Association as having an impressive effect on cardiovascular health. Unfortunately, according to National Health and Nutrition Examination Survey (NHANES) data, < 1% of US adults follow an ideal healthy diet, said Dr Sherzai.

The California Teachers Study was started in 1995 and comprised 133 479 female public school teachers and administrators, who completed paper Food Frequency Questionnaires by mail every 4 to 5 years. Using linked California state hospitalization data from 1996 to 2011, incident strokes were identified and validated through a process of adjudication by a committee of neurologists. During the follow-up period, 3165 strokes (2270 ischemic strokes and 895 hemorrhagic strokes) were identified.

A variety of Mediterranean diet pattern scores have been created to explore the association between the dietary pattern and cardiovascular disease among non-Mediterranean populations. For the current study,

dietary pattern was evaluated using a validated 10-point Mediterranean diet scoring system in which a higher score represented greater adherence to components of a Mediterranean diet (high consumption of plant-based foods, including plant proteins, monounsaturated fat, and fish, and lower consumption of animal products and dairy) [Trichopoulou A et al. *N Engl J Med.* 2003]. For ethanol, 1 point was given if consumption was 5 to 15 g/day, and 0 points if consumption was < 5 or > 15 g/day.

A multivariable Cox proportional hazards model was used to assess the association between Mediterranean diet score and stroke, ischemic stroke, and hemorrhagic stroke.

A total of 104 268 participants completed the study. Their mean age was 52.9 years, 87.4% were non-Hispanic whites, 66.1% were never smokers, and 28.1% were former smokers. Some 58.2% had a normal body mass index (BMI; 18.5 to 25.0 g/m^2). Twenty-five percent were overweight (BMI: 25 to 30 g/m^2) and 14.3% were obese (BMI: ≥ 30 g/m^2).

Most of the women engaged in up to 2.5 hours of moderate physical activity on a weekly basis. Hypertension was present in 34.8%, diabetes in 7.3%, hypercholesterolemia in 22.8%, coronary heart disease or myocardial infarction in 7.6%, and atrial fibrillation in 6.9%. Some 40.1% were premenopausal, 12.1% were peri- or postmenopausal and not on hormone therapy, and 36.1% were peri- or postmenopausal and either currently or formerly on hormone therapy.

The cohort was divided into 5 dietary score groups: 0-2, 3, 4, 5, and 6-9. One-fourth (24.27%) were in the maximum score group, while 16.1% had the lowest score.

The unadjusted risk of stroke was up to 25% lower in the highest dietary category (HR, 0.75) compared with the lowest score category (*P* < .0001). When adjusted for sociodemographic factors and disease variables, the HR in the highest scoring group was 0.83 and in the fourth category, the HR was 0.86 (*P* = .009).

For ischemic stroke incidence, the unadjusted HR was 0.72 in the highest score category compared with the lowest category (*P* < .0001), which remained significant when adjusted for confounding factors (HR, 0.82; *P* = .01).

For hemorrhagic stroke, no significant association was detected, potentially because of the low number of hemorrhagic strokes, said Dr Sherzai, and this relationship did not change when adjusted for confounding factors.

In brief, this study showed that greater adherence to Mediterranean dietary pattern was associated with a 10% to 18% decreased risk in total and ischemic stroke incidence, with no significant association with hemorrhagic stroke.