
Using data from the TIAregistry.org project, Amarenco et al described the risk of stroke, acute coronary syndrome, or death from cardiovascular causes among individuals with transient ischemic attack or minor stroke who received urgent evaluation (<7 days) by a stroke specialist.

From 2009 to 2011, 4789 patients at 61 sites in 21 countries were enrolled, of whom 78% were evaluated by a stroke specialist <24 hours after symptom onset. On initial evaluation, 33.4% of the patients had an acute stroke, 15.5% had ≥1 extracranial or intracranial arterial stenosis ≥50%, and 10.4% had atrial fibrillation. Nearly one third (26.9%) of those with carotid stenosis underwent revascularization. With a median follow-up of 27.2 months (interquartile range, 12.4–48.1), risk of recurrent stroke at 2, 7, 30, 90, and 365 days were 1.5%, 2.1%, 2.8%, 3.7%, and 5.1%. One-year risk of composite cardiovascular events was 6.2% (95% confidence interval [CI], 5.5–7.0). After multivariable analyses, multiple infarctions on brain imaging (hazard ratio, 2.16; 95% CI, 1.5–3.2), large-artery atherosclerosis (hazard ratio, 2.0; 95% CI, 1.3–3.1), and an ABCD² score (age, blood pressure, clinical features, duration of symptoms, diabetes) of ≥6 (hazard ratio, 2.2; 95% CI, 1.4–3.4) were each independently associated with a doubling in stroke risk. One fifth (22%) of recurrent strokes occurred in those with ABCD² scores of <4 and with preventable underlying causes, such as atrial fibrillation or ipsilateral internal carotid artery stenosis ≥50%.

The event rates were 50% lower than in previous cohorts; this reduction may be explained by organized systems of stroke care designed to rapidly evaluate patients with transient ischemic attack or minor stroke and implement appropriate secondary stroke prevention strategies, close outpatient follow-up, and efforts at improving health literacy, medication adherence, and lifestyle factors. Of note, the patients had excellent medication adherence and blood pressure and lipid control at 1 year.

This study corroborated previous studies that suggested that the ABCD² score does not reliably discriminate between patients at low versus high risk of early recurrent stroke, nor does it identify patients with carotid stenosis or atrial fibrillation in need of urgent intervention. Neuroimaging provides information about the distribution, size, and potential mechanism of the stroke; therefore, incorporating neuroimaging into stroke prediction models may be helpful.

The study’s strengths include the number and variety of international sites, comprehensive data on medical history and diagnostic evaluations, and high retention rates at 1 year. The study was not randomized, lacked a comparison group, and did not include standardization of transient ischemic attack and stroke evaluation and treatment; however, its purpose was to assess event rates in the setting of usual local care. Limitations included reliance on sites for reporting their own outcomes and adjudication of events based on sites’ narrative descriptions. Although data on socioeconomic status, insurance status, and access to care were not presented, nearly 90% sought medical attention <24 hours of symptom onset, suggesting high health literacy and good access to care. Further studies are needed to determine the key factors driving the low event rates.


Obesity and oral contraceptives (OCs) are independent risk factors for deep vein thrombosis and pulmonary embolism, yet the association between obesity and cerebral venous thrombosis (CVT) is unknown. Zuurbier et al conducted a case–control study of individuals with CVT (n=186) from 2 academic medical centers from 2006 to 2014. Historic healthy controls (n=6134) were from the control group of the Dutch Multiple Environmental and Genetic Assessment of Risk Factors for Venous Thrombosis study, a case–control study including patients with a first deep vein thrombosis of the leg or pulmonary embolism from 1999 to 2004.

Compared with controls, individuals with CVT were younger, more often female, more often taking OC, and more frequently had a history of cancer. After multivariable adjustment, the risk of CVT was increased in patients with obesity (body mass index [BMI] ≥30 kg/m²; adjusted odds ratio, 2.63; 95% CI, 1.53–4.54) compared with those with a
normal BMI. Women had a strong association between CVT and obesity (adjusted odds ratio, 3.50; 95% CI, 2.00–6.14), but men did not (adjusted odds ratio, 1.16; 95% CI, 0.25–5.30). In women who used OC, overweight and obesity were associated with higher risk of CVT in a dose-dependent manner (BMI, 25.0–29.9: adjusted odds ratio, 11.87; 95% CI, 5.94–23.74; BMI ≥30: adjusted odds ratio, 29.26; 95% CI, 13.47–63.60). No association was found in women who did not use OC.

In the absence of a prospective study, this study demonstrates a dose-dependent relationship between obesity and CVT among women using OCs. The study is limited by the small number of patients with CVT, especially men and women without OC use, unmatched historical controls, missing BMI data in 15.9% of cases, and lack of data on genetic thrombophilias. Nevertheless, the study is informative to provide counseling to overweight/obese women about the increased risk of CVT with OC.
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