

Diabetes and Metabolic Syndrome Can Contribute to Recurrent Vascular Events in Patients with Lacunar Stroke?

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Lacunar stroke corresponds to 15-25% of all ischemic strokes, and has a more favorable prognosis and their survival rates at 30 days and 1 year are about 90-100%, and about 70-80% patients are functionally independent at 1 year, compared with less than 50% of patients with non-lacunar stroke. Patients with a lacunar stroke usually present with a classical lacunar syndrome (sensorimotor stroke, pure sensory syndrome, ataxic hemiparesis or dysarthria-clumsy hand. and an atypical lacunar syndrome). Lacunar stroke may involve the thalamus, basal ganglia and pons [1-7].

Zhu and colleagues reported a study with 2,999 participants (SPS3 trial), 25% had metabolic syndrome (MetS) only, 6% had diabetes mellitus (DM) only, 32% had both conditions. In 3.8 years of follow-up, there were 274 recurrent strokes (240 ischemic, 34 hemorrhagic) and 74 myocardial infarctions (MI); among the 240 ischemic strokes, 134 (56%) were lacunar. The rates of any recurrent stroke (HR 1.7, 95% [CI] 1.3-2.3) or lacunar stroke (HR 2.4, 95% [CI] 1.5-3.7) were significantly higher for those with concurrent METS and DM. Risk of incident MI was higher in participants with DM (HR 2.8, 95% CI 1.1-7.0) or concurrent DM and MetS (HR 2.6, 95% CI 1.4-4.9).

MetS and DM were associated with stroke recurrence.

Lacunar stroke reduction is to control vascular risk factors such as hypertension, DM, MetS, dyslipidemia, visceral obesity and smoking cessation. Changes in lifestyle like a healthy diet, exercise, reducing stress levels are also recommended strategies.

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