

Individualized stroke treatment available for patients, though underutilized

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Nearly 90 percent of the 700,000 strokes that affect U.S. patients each year are caused by a blockage of blood vessels supplying the brain, known as ischemic stroke. A new study published in *Catheterization and Cardiovascular Interventions*, the official journal of The Society for Cardiovascular Angiography and Interventions (SCAI), provides solid evidence of the effectiveness of catheter-based therapy (CBT) to remove blood clots in stroke patients. CBTs, which include stents and thrombectomy, may be used for ischemic stroke patients who arrive too late or have contraindications for intravenous thrombolysis, a drug treatment frequently used to break down blood clots.

Strokes are the third leading cause of death in the U.S. and the most common cause of adult disability. To be effective, intravenous thrombolysis must be administered less than three hours after the onset of [stroke](#) symptoms. Unfortunately, and despite efforts to educate the public on the warning signs of stroke and the need to seek [treatment](#) quickly, most [patients](#) arrive at the emergency room too late. It is estimated that less than 5 percent of patients are eligible for this treatment which has prompted interest in alternative therapies, like CBT, that restore blood flow.

CBT applies the same treatment model for identifying a blocked artery causing a heart attack to stroke therapy. It allows the physician to tailor the treatment based on the location and characteristics of the blockage. "We believe the individualized treatment that can be offered with this approach optimizes patient outcomes and minimizes risk," says Dr.

Christopher J. White, co-author of the study.

Researchers from the Ochsner Heart and Vascular Institute in New Orleans examined 26 patients who underwent CBT and were not eligible for intravenous thrombolysis. Patients were tested for neurologic disability at 90 days, improvement in the NIH Stroke Scale (NIHSS). The results showed that 89 percent (23/26) of the patients were successfully treated with CBT. At follow-up, half the patients had slight or no neurologic disability and 18 significantly improved their NIHSS score.

The study notes that CBT has been utilized in other trials up to eight hours after stroke onset, which is a significant advantage over intravenous thrombolysis. Although treating acute stroke is not without risks, with limited options for patients ineligible for intravenous thrombolysis, the authors encourage aggressive treatment to minimize damage to the brain and long-term disability.

Source: Wiley ([news](#) : [web](#))

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