

# Study shows stroke incidence related to angioplasty remains steady over past 15 years

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Results of a Mayo Clinic study show the incidence of stroke or mini-stroke related to a coronary angioplasty remained steady over a 15-year period. Researchers say this is good news because physicians now are performing the artery-opening procedure on older patients who are sicker and need more complicated treatment.

The results will be presented today at the American Heart Association's Scientific Sessions 2009 in Orlando, Fla.

Angioplasty, a procedure used to open clogged arteries, can improve chest pain or shortness of breath, or open an artery quickly to reduce damage to the heart during an attack. During angioplasty, also known as percutaneous [coronary intervention](#) (PCI), a tiny balloon is temporarily inserted and inflated to unclog and widen the artery. In some cases, a small metal coil called a stent is placed in the artery to keep it propped open.

In a retrospective study of 17,249 patients who had 21,502 angioplasty procedures between 1994 and 2008 at Mayo Clinic in Rochester, Minn., the researchers identified patients who suffered an angioplasty-related cerebrovascular accident (CVA), defined as a stroke, or a [transient ischemic attack](#) (TIA or mini-stroke), and compared outcomes with the remainder of the study population, according to senior author Rajiv Gulati, M.D., Ph.D., a Mayo Clinic cardiologist. Eighty-four patients, or three or four in 1,000 patients, had a stroke or a TIA, and 23 percent of those were mini-strokes, Dr. Gulati says.

The low number of patients who had a stroke was somewhat surprising, he says. "Given that we are now dealing with older and sicker patients, with more extensive blockages requiring more complex treatment, we found the current incidence of stroke related to this procedure to still be very low indeed," he says.

The research showed that patients with CVA were more likely to be older (average age was 74 years old versus 66 years old), female (52 percent versus 29 percent), have moderate-to-severe [renal disease](#) (8 percent versus 3.7 percent) and have a history of stroke unrelated to prior angioplasty (31 percent versus 11 percent).

This study helps physicians recognize patients who are at higher risk of stroke or TIA, Dr. Gulati says. And if a patient has a stroke or TIA related to angioplasty treatment, technologies to use clot-busting drugs or remove the clot are more readily available today. "We now have newer technologies that can deal with [stroke](#) should the worst happen," he says. "And recognizing patients at higher risk puts us in a good position to help."

The research also showed that other factors were predictors of CVA, such as the number of diseased coronary arteries, presence of intracoronary thrombus, an increased number of vessels treated and the need for emergency [angioplasty](#).

Source: Mayo Clinic ([news](#) : [web](#))

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