

Stroke risk higher after bypass than angioplasty: analysis

August 21 2012, By Kathleen Doheny, HealthDay Reporter

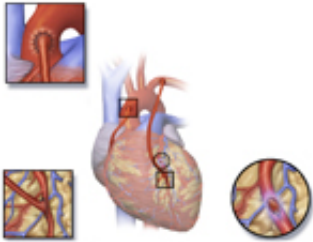


Image courtesy of Blausen Medical

About 1 in 80 surgery patients, 1 in 300 angioplasty patients have stroke complication, new review shows.

(HealthDay News) -- The potential for a stroke is far more common after a bypass than after angioplasty, new research reports, even though the risk after either heart procedure is still relatively low.

A team of researchers analyzed the results of 19 clinical trials involving nearly 11,000 patients who were assigned randomly to get [coronary artery bypass graft surgery](#) (CABG) or angioplasty, also called PCA (percutaneous [coronary intervention](#)), a procedure in which a balloon is used to re-open the [clogged artery](#).

"At 30 days, stroke was about four times more common with [bypass surgery](#) compared to PCA," said study author Dr. Gregg Stone, a professor of medicine at Columbia University Medical Center in New

York City.

Stroke is an important complication to track, Stone noted, adding, "Next to death, it is probably the most feared complication."

The new analysis is published online Aug. 21 in *JACC*: [Cardiovascular Interventions](#). It will also be published in the Aug. 28 issue of the [Journal of the American College of Cardiology](#).

In bypass surgery, a healthy artery or vein taken from the patient is grafted, or connected, to other arteries in the heart to bypass the blocked vessel. In angioplasty, a catheter is inserted into the vessel to the point of blockage, and then a balloon is inflated to clear it. Sometimes a stent is used to keep open the vessel.

Stone's team looked at the patients' stroke rates 30 days and a year after the procedures.

At 30 days, 1.2 percent of the surgery patients had suffered a stroke, compared with .34 percent of the angioplasty patients. At the one-year mark, 1.83 percent of the [surgery patients](#) and .99 percent of the angioplasty patients had had a stroke.

Put another way: "The likelihood of stroke is about 1 in 80 for patients who have surgery and 1 in 300 for patients who have angioplasty," Stone said.

The finding held, he added, even after researchers took into account the extent of disease and other variables.

While some patients clearly need surgery, Stone said, some have disease that could be treated either way. For those patients, he said, the findings about stroke can be weighed into their decision about which treatment to

choose.

The study findings echo what cardiologists have long believed, said Dr. Kirk Garratt, director of interventional cardiology at Lenox Hill Hospital in New York City.

In bypass surgery, he said, there is naturally more trauma to the body than there is during angioplasty.

The new analysis, he said, "confirms what has been accepted by cardiologists."

While some patients have the option of either procedure, such as patients with only one or two blockages, surgery is indicated if a patient has multiple blockages, Garratt added.

According to the U.S. Centers for Disease Control and Prevention, hospital discharge data from 2009 shows about 415,000 bypass graft surgeries and 605,000 angioplasties or atherectomy (a similar procedure) were done that year.

More information: To learn more about [heart disease](#), go to the American Heart Association.

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