

# Neurological complications of heart surgery

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This is neurologist Dr. Jose Biller of Loyola University Health System. Credit: NA

Possible neurological complications of heart surgery, ranging from headaches to strokes, are detailed in a new report in the online journal *MedLink Neurology*.

The review article, which compiled results of previously published studies, was written by Dr. Betsy Love, Dr. Sara Hocker and senior author Dr. Jose Biller of Loyola University Chicago's Stritch School of Medicine.

In the most comprehensive and up-to-date review of its kind, researchers

list possible nervous system complications of bypass surgeries, aortic [surgery](#), cardiac catheterizations, valve replacements, heart transplants and surgeries for [congenital heart disease](#) and heart tumors.

For example, possible complications from bypass surgery include vision problems, paralysis, hoarseness, movement disorders and disturbances in learning, memory, attention, concentration and mental agility.

Depending on the the patient's age, the operating techniques used and other factors, the risk of stroke ranges from just under 1 percent to as high as 5 percent, according to studies cited in the article.

"Neurologic complications of cardiac procedures can involve literally any part of the central and peripheral nervous systems," researchers wrote.

In 2006, 1.3 million angioplasties and 448,000 bypass surgeries were performed in the United States, according to the American Heart Association. Thousands of other patients underwent surgeries for other cardiac conditions.

Biller said that in cardiac surgery, there's always a risk of neurologic complications, especially in older patients who have other health problems. Biller is chairman of the neurology department at Loyola's Stritch School of Medicine.

However, Biller said patients should not be afraid to undergo cardiac procedures. Many complications are rare. And despite the risks, cardiac surgeries generally "are highly beneficial and life saving," he said.

The article is an updated and fully revised version of a review article published in *MedLink Neurology* in June, 2008. The original article was written by Biller, Love and Dr. James Fleck of Indiana University School of Medicine.

The revised article includes a new section on aortic surgeries, such as aortic valve replacements. Complications of aortic surgery include stroke, paraplegia and peripheral nerve dysfunction. The new article also includes new sections on surgery to remove atrial myxomas (heart tumors) and surgery to close a hole in the heart called a patent foramen ovale.

Source: Loyola University Health System ([news](#) : [web](#))

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