

Bringing the Future of Stroke Care to the Community

By Good Samaritan Hospital Medical Center

The Stroke & Brain Aneurysm Center at Good Samaritan Hospital Medical Center will treat the most complex stroke cases by combining the most advanced imaging capabilities in the area, including a 512 speed low-dose CT scanner, a biplane angiography system and the experience and skill of the Center's specialized neurointerventionalists, neurointensivists and intensive care trained nurses and support staff.

Neurointervention

Neurointerventional surgery is a more effective, minimally invasive procedure to treat stroke patients. Through a small hole in the skin, tiny catheters, needles or tubes are placed and guided to their intended targets in the brain, head/neck, or spine. Through the use of sophisticated imaging technologies, these devices are precisely guided into highly sensitive neural structures. Once there, advanced medical devices are used to accomplish minimally invasive surgical solutions. Through this technique, conditions such as strokes, brain aneurysms and tumors that are present in the delicate areas of the brain, neck or spine can be treated in a minimally invasive procedure.

Biplane Angiography

As part of a nearly 8,000 square foot, first floor renovation, the Medical Center created a pre-and post-procedure space and a state-of-the-art neurointerventional biplane angiography system. With faster image acquisition, biplane technology represents an improvement over single-plane angiography systems and enables the performance of complex neuro-interventional procedures. For many patients, this means a shorter hospital stay, quicker recovery time, reduced pain and smaller risk of complications.

130,000 The number of Americans killed by strokes annually

#5 Fifth leading cause of death in the U.S. and the leading cause of long-term disability

1.9 Million

The number of neurons a stroke patient loses each minute if treatment is delayed

\$34 Billion

Direct and indirect costs of strokes in the US.

+5 Years Patients who receive stroke surgery increase their life expectancy over those who do not receive neuro-intervention treatment.

Neurological Intensive Care Unit

Following procedures, patients will be transported to a dedicated five-bed neurological intensive care unit for close monitoring by a multidisciplinary team of subspecialty-trained board certified physicians, nurses and other professionals. The unit will also contain four stepdown beds, allowing for the same advanced team to care for you throughout your stay.

Kimon Bekelis, MD, will serve as the Director of the Stroke & Brain Aneurysm Center at Good Samaritan. Dr. Bekelis is one of the most prominent researchers in stroke care and treatment in the nation. After receiving his medical degree, he completed his neurosurgery residency at Dartmouth-Hitchcock Medical Center. Most recently, he finished a fellowship in cerebrovascular and endovascular neurosurgery at Thomas Jefferson University Hospital, one of the largest stroke centers in the country.

Under the leadership of Dr. Bekelis, The Stroke & Brain Aneurysm Center's neurosurgeons, neurointensivists,

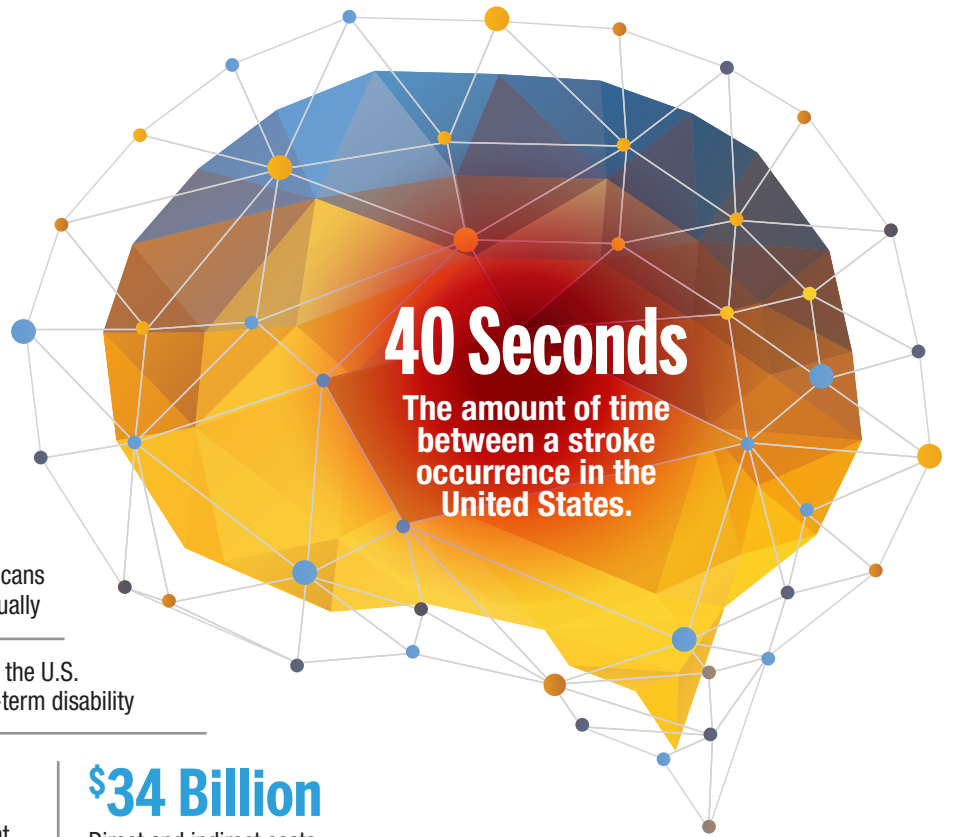
neurologists, nurse practitioners, physician assistants and nurses with extensive training in neurological critical care, and the use of advanced monitoring technology, will provide comprehensive and continuous bedside

care to patients during their recovery. Thorough diagnostic evaluation, careful monitoring, and innovative treatment techniques will help our team ensure the best possible outcome for each individual patient.

For more information about The Stroke & Brain Aneurysm Center at Good Samaritan, please call 631-376-4444 or visit good-samaritan-hospital.org/strokebraincenter.



Biplane Room at the Stroke & Brain Aneurysm Center at Good Samaritan Hospital Medical Center.



THE STROKE AND BRAIN ANEURYSM CENTER *at* Good Samaritan Hospital Medical Center

www.good-samaritan-hospital.org/strokebraincenter



INNOVATIVE **STROKE** INTERVENTION

MODERN TECHNOLOGY FUELING ADVANCEMENTS IN TREATMENT AND SURVIVAL RATES

SPONSORED BY  **Good Samaritan Hospital Medical Center**
Catholic Health Services
At the heart of health

EVERY 40 SECONDS SOMEONE WILL EXPERIENCE A STROKE.

Blood flow to the brain will cease. Brain cells—devoid of oxygen—will begin to die. And, depending on the location and severity, the stroke may cause disability or even death.

Now, however, there is an innovative surgical procedure to treat ischemic strokes, the most common, which account for 87 percent of all strokes, says the National Stroke Association.

- 1** **KNOW THE SIGNS OF STROKE AND ACT F.A.S.T.**
- F** Face Drooping
 - A** Arm Weakness
 - S** Speech Difficulty
 - T** Time to call 911

2 **GET TO A HOSPITAL STAT**

After signs and symptoms are evaluated, a brain CT scan follows to check for bleeding or damage to brain cells. If the patient arrives within 3 to 4.5 hours of symptom onset, tPA (tissue plasminogen activator) the “gold standard” of treatment will be administered intravenously to bust the clot.

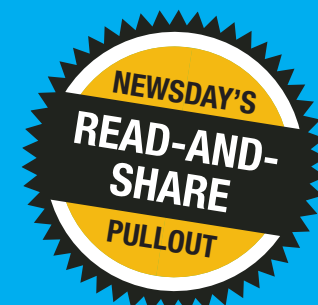
3 **THE GAME CHANGER**

Now, aside from tPA, there's a game-changing method called, mechanical thrombectomy, which extends the timeframe to treat those suffering more severe stroke symptoms. This endovascular surgical procedure is minimally invasive and allows patients with devastating strokes to return back to their normal functions.

4 **HOW IT WORKS**

To remove the brain clot, a catheter is inserted into the groin **[A]**, threaded through the aorta and up to the brain **[B]**. There, a stent, acting like a fish net, suctions and pulls the clot out allowing blood to flow once again **[C]**. This advanced treatment can be administered up to six hours after stroke onset and is now performed at Good Samaritan Hospital Medical Center.

[B] The catheter is threaded from the groin through the aorta and up to the brain where the clot is suctioned out.



[C] The goal of the procedure is to open blood vessels and restore blood flow by removing the clot from a large intracranial vessel.

[A] Using biplane angiography—a vessel imaging modality to visually assist them, surgeons insert a catheter through the artery in the groin.

Written by Marie Wolf. Source: Dr. Kimon Bekelis, Chairman of Neurointerventional Services for Catholic Health Services of Long Island, and Director of the Stroke and Brain Aneurysm Center, Good Samaritan Hospital Medical Center.



KIMON BEKELIS, MD, has been named Director of the Stroke & Brain Aneurysm Center at Good Samaritan Hospital Medical Center and Co-Director of the Medical Center's Neurological Intensive Care Unit. In addition, Dr. Bekelis will be the Chairman of Neurointerventional Services and Director of Population Health Research Institute of New York for Catholic Health Services.

THE STROKE AND BRAIN ANEURYSM CENTER *at* Good Samaritan Hospital Medical Center

www.good-samaritan-hospital.org/strokebraincenter



EVERY 40 SECONDS SOMEONE WILL EXPERIENCE A STROKE

INNOVATIVE STROKE INTERVENTION

Good Samaritan Hospital Medical Center
Catholic Health Services
At the heart of health

Sponsored by



Exceptional Skill, Advanced Technology and Award-Winning Services

GOOD SAMARITAN NOT ONLY PROVIDES THE EXPERIENCE THAT COUNTS,
BUT ALSO A LEVEL OF CARE THAT IS UNMATCHED.



Good Samaritan Hospital
Medical Center
Catholic Health Services
At the heart of health

To learn more about the Stroke and Brain Aneurysm Center
at Good Samaritan, please visit
www.good-samaritan-hospital.org/strokebraincenter