

A woman with dark hair, wearing a purple long-sleeved shirt and blue jeans, stands in a kitchen. She is smiling and holding a glass dish filled with a baked, orange-colored food item. The kitchen has dark wood cabinets, a microwave, and a stove. A sign on the wall reads "LIVE WELL LOVE MUCH LAUGH OFTEN".

BRAIN ANEURYSM

Life-Saving Treatment

Sharon Clarke's story is nothing short of a miracle.

Shown: Sharon Clarke, 54, is back at home cooking and baking for her large extended family after successful treatment at Robert Wood Johnson University Hospital for a life-threatening brain aneurysm.

Not only did Mrs. Clarke survive a life-threatening ruptured brain aneurysm (a hemorrhagic stroke), but she went home two weeks later and is back to her favorite activities: playing with her grandchildren and cooking for her large family.

The rupture of a brain aneurysm — a weak, bulging spot on an artery wall — creates an immediate, life-threatening health emergency. Sixty percent do not survive the rupture. Indeed, 15 percent never make it to the hospital, and two thirds of survivors suffer some lasting neurologic effects.

Mrs. Clarke, then 53, had no idea that she had an aneurysm, but on October 12th, when it ruptured, she developed the classic symptom: the worst headache of her life. Alone at home, she collapsed face-down, unconscious on the garage floor. Fortunately, her daughter Ameerah discovered her a few minutes later and promptly called 911.

A North Brunswick EMS unit responded immediately and, kept in constant radio communication with the Emergency Department (ED) at Robert Wood Johnson University Hospital (RWJ), where they initiated the “brain attack” protocol. Soon after Mrs. Clarke’s arrival in the ED, a CT (computed tomography) scan confirmed the presence of bleeding in the brain from a ruptured aneurysm.

The ED called Gaurav Gupta, MD, Assistant Professor and Director of Endovascular Neurosurgery at Robert Wood Johnson Medical School (RWJMS) and an attending neurosurgeon at RWJ a dual-trained

neurosurgeon and an expert on disorders of the blood vessels of the brain and spinal cord. After a CT angiogram (contrast X-ray of the blood vessels), Dr. Gupta decided that Mrs. Clarke’s aneurysm would best be treated by coil embolization, or “coiling,” a minimally invasive, neuroendovascular (within the blood vessel) procedure that has revolutionized the treatment of brain aneurysms, says interventional neuroradiologist Irwin Keller, MD, Clinical Professor of Radiology, RWJMS, and a member of the RWJ neurovascular team.

Shortly after the angiogram, Mrs. Clarke suddenly began to deteriorate further. She was intubated by Jonathan McCoy, MD, Associate Professor of Emergency Medicine, RWJMS, and Dr. Gupta placed an external ventricular drain in her skull to relieve pressure on her brain.

Mrs. Clarke was stabilized and taken to the Neurointerventional Suite — one of the nation’s most advanced — where Dr. Gupta and interventional radiologist, Sudipta Roychowdhury, MD, Clinical Assistant Professor of Radiology, RWJMS, would perform the coiling procedure. RWJ is only the second hospital in the U.S. to have the state-of-the-art GE biplane X-ray suite, supporting the most advanced treatments for patients with disorders of the blood vessels of the brain and spinal cord.

Through a small incision in his patient’s groin, Dr. Gupta introduced a slender tube into the femoral artery and, guided by continual X-ray visualization, he directed the tube through the aorta and then into the carotid

artery in the neck. He next passed a smaller tube through the catheter, guiding it to the aneurysm site through a narrow, two-to-three millimeter artery in the brain. The aneurysm itself measured only four-by-three millimeter — barely larger than the tip of a pen.

He ran the soft, pliable platinum coil system through the tube and placed it inside the aneurysm, where it spiraled into the shape of the bulging blood vessel, filling it, and blocking blood flow from the parent artery.

For 10 days, Mrs. Clarke remained in a coma, undergoing additional procedures to treat vasospasms (spasms of blood vessels) and other predictable consequences of her stroke. But on day 10, she opened her eyes, and two weeks after her surgery, she went home, accompanied by her seven ever-vigilant daughters. In December, in the second and final stage of the procedure, Dr. Gupta secured the coils by placing a stent across the aneurysm’s wide neck. Mrs. Clarke was discharged two days later and returned home for the holidays.

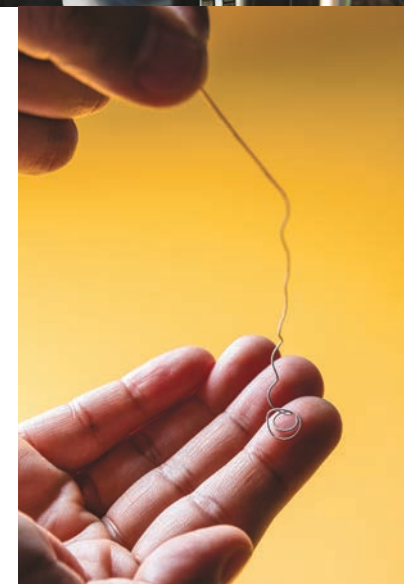
Ameerah Davis, one of Mrs. Clarke’s daughters, says, “Dr. Gupta is wonderful and caring, and the nurses in the SICU were the best. Who knows what would have happened if we hadn’t gone to RWJ?”

Adds Mrs. Clarke, “Dr. Gupta means the world to me.”

Visit www.rwjuh.edu/endovascular or call 1-888-MD-RWJUH.



Shown: Guarav Gupta, Assistant Professor and Director of Endovascular Neurosurgery at Robert Wood Johnson Medical School (RWJMS) and an attending neurosurgeon at Robert Wood Johnson University Hospital (RWJ).



Shown: A coil, smaller than a size of the human fingertip, was inserted into the blood vessel in Mrs. Clarke’s brain where it spiraled into the shape of the bulging blood vessel, filling it, and blocking blood flow from the parent artery.