

## The victim of the nation's third largest killer tells what science—and family—can do to return an invalid to a normal life



Perfectly mobile now, Jim visits daughter Nancy, 9, at day camp.

ten blamed, really don't have much to do with causing strokes. In a recent large-scale study at the New York University-Bellevue Medical Center, only 3.5 percent of several hundred stroke victims were stricken under circumstances that might be described as acute stress. Many of them were asleep, just as I was, when the stroke occurred. Typically, over four times as many housewives had strokes as did professional people.

The word "stroke" has no precise meaning. It's just a way of indicating the symptoms of cerebrovascular accident—obstruction of the circulation of the blood to or in the brain by hemorrhage, by narrowing of an arteriosclerotic blood vessel, or by clot. If the stoppage of blood (which supplies vital oxygen to brain tissues) lasts even a few minutes, it is enough to kill the tissues affected and knock out the things they boss—leg or arm movements, speech, and memory.

If the damaged tissues are on the left side of the brain, the right side of the body is stricken. Injury on the right side of the brain knocks out the left side of the body. The extent of the injury depends on which and how large a region of the brain is affected. Speech is controlled by a dime-size piece of tissue called "Broca's Area." When it is only lightly damaged, there is just a slurring of words, which usually clears up in a few days, as it did in my case.

### Why I Had a Stroke

At the Northern Westchester Hospital in Mt. Kisco, N.Y., where I was taken by ambulance from my home, specialists determined the cause of my stroke: the high blood pressure I have had for years had ruptured a weakened part of an artery in my brain, causing hemorrhage. Because I was not unconscious and because my speech, while slurred, was not seriously affected, the doctors reasoned that the bleeding was not extensive, that nature itself had already stepped in to start patching the hole. This was backed up by the lack of blood in my spinal fluid.

Until just a few years ago, doctors generally thought that all strokes were caused by blood-vessel accidents inside the brain itself. But Dr. C. Miller Fisher of Montreal, among others, was baffled by consistent autopsy findings on stroke victims which showed no damage at all to blood vessels above the neck. In the early 1950s, Dr. Fisher, studying 432 autopsies, discovered that, in over a third, one or more of the four neck arteries supplying blood to the brain were narrowed or clotted to such an extent that the tissues in the brain were cut off from nourishment. This was quickly ruled out as a cause of my stroke by tests that showed the blood pressure in my neck arteries to be normal. But in cases where the neck arteries are involved, dramatic new procedures are now being developed.

Then, shortly after Dr. Fisher's proof that not

all strokes originated in the brain, a nontoxic radio-opaque dye, which could be injected into the circulatory system, was perfected. By using rapid-fire X-ray equipment, it became possible to follow the dye (injected into either arm or neck arteries), as it surged up through the neck to make its three-second trip to the brain. The dye shows up white on the X-ray film. Where there is a block, a dark shadow appears.

This new diagnostic tool enabled Baylor University's Dr. Michael DeBakey, a noted vascular surgeon, to develop in 1954 a surgical method for correction of a clogged neck artery. Working through a small incision in the neck, Dr. DeBakey clamps off the artery on either side of the obstruction, installing a temporary "shunt" so that blood supply to the brain will be maintained during surgery. He removes the fatty clots which have narrowed the artery channel, and further enlarges the passage by means of a Dacron patch.

Since then, Dr. DeBakey and his associates have performed blocked-artery surgery on several hundred stroke patients. This surgery is now being performed at 20 major medical centers in an evaluation study of its benefits in comparison with "natural" recovery of stroke patients.

The most practical advances in general stroke treatment and prevention today are the new drugs—those that retard blood clotting and those that lower and control high blood pressure. A recent report to the American Heart Association largely credits these drugs with a 22 percent drop in death from strokes among white males in the 45-64 age group. The anticoagulants, used to retard clot formation, boost a stroke patient's chances for survival by nearly one-third, according to a five-year study at the New York Hospital-Cornell and New York University-Bellevue medical centers. In a Mayo Clinic study, the drugs appear to reduce the incidence of second strokes by as much as 75 percent.

### The High Price of Neglect

Two years ago, when my blood pressure shot above the 200 mark and I had to be hospitalized briefly, I was given the new drugs to help lower and control it. They worked fine but left me severely depressed. Against my doctor's advice, I stopped them. My blood pressure shot back skyward, and my stroke appears to have been the result. Now, I'm taking them again—two aspirin-size tablets a day—and I am determined to keep on doing so for the rest of life.

Once you have suffered a stroke, you discover that rehabilitation is accomplishing near-miracles. Stroke no longer means the end of a person's useful life. But rehabilitation must begin early, whether in a hospital or at home. Exercise of seemingly useless muscles must begin at once, since inactivity can be more harmful than the original damage caused by the stroke. At first

By JAMES WINCHESTER

the muscles and nerves in paralyzed parts of the body are as good as ever. It is just that their control centers in the brain are damaged.

But deterioration of muscles and nerves sets in quickly and progresses rapidly when the stroke victim is bedfast or immobile. Other things happen, too. Circulation slows, calcium leaves the bones. Moreover, you can quickly acquire the attitude that you're an invalid. Dr. Anita Isaac, a Kansas physician specializing in stroke rehabilitation, says, "I consider it an injustice to a stroke victim if he isn't standing within 24 hours, either alone or supported."

I was sitting up in bed the first day after my stroke. On the second, I was standing, assisted, though my leg was completely paralyzed. That same day, the hospital's physical therapist began exercising my muscles with gentle massage every two or three hours although I still couldn't move them myself. Before the end of the week, with help, I was getting across to the bathroom. Every day I sat in a chair while my bed was being made.

Comments Dr. Howard Rusk, who heads the New York University-Bellevue Institute for Physical Medicine and Rehabilitation in New York City, where I was transferred for intensive physical therapy just ten days after my attack, "If simple physical therapy begins within the first week after a stroke, most victims can be walking and taking care of themselves in six to eight weeks, sometimes sooner."

### Caring for the Stroke Patient

The best thing that family members can do for stroke patients, I think, is *not* to treat them as invalids. My wife, bless her, assumes I can do anything. Somehow or other, though, she always seems to be around when I'm dressing. It's just *natural* when she casually reaches out to help me with the cuff button on my left sleeve. I don't feel dependent. Believe me, that's important.

Recovery for a stroke victim isn't easy for either the patient or his family. Physically, stroke victims may look and feel fine. But a part of the brain has been destroyed. Only nature and time can train new tissues to take over. Until they do, there are bound to be emotional changes. These should be expected but recognized as temporary. For example, during their recovery periods, stroke victims, almost without exception, are irritable and snappish, often over trifles.

When I first started back to work, I'd dictate letters to my wife, who'd take them down in long-hand. She's not a secretary, and it was laborious work for her. Often, though, I'd have her in tears because she made a simple mistake, such as misinterpreting a word. I would become utterly outraged. Later, I would be bitterly ashamed.

Another thing that stroke victims frequently do in the early stages of recovery is cry. You're not sad. Nothing has upset you. You just start

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