

Risk of stroke on the rise in the young

BY MARK FUERST



The vast majority of strokes occur after age 65, but more and more young people are finding themselves at risk for stroke.

Recent statistics suggest the risk of stroke in young people is on the rise. Compared to US hospital admissions in the mid-1990s, there was a 53 percent increase in ischemic stroke among those ages 15 and 44 in the late 2000s. Over the same time, there was a trend toward an increased prevalence of stroke risk factors, specially high blood pressure, diabetes, obesity, high cholesterol, congenital heart disease and smoking.

The causes of stroke in young people are more diverse and relatively uncommon as compared to older people. Most strokes in older adults are due to atherosclerosis, or fat and calcium deposits in the arteries, causing blockages in blood vessels. Among the young, the causes range from congenital cardiac valve problems to arrhythmias to congenital heart disease.

Half of all strokes among young people are due to *ischemic stroke*. This occurs as a result of an obstruction within a blood vessel supplying blood to the brain. About 15 percent of all ischemic strokes occur in young adults (under 40) and adolescents. The other half of strokes in young people are due to *hemorrhagic stroke*, which occurs when a weakened blood vessel ruptures. The most common cause of hemorrhagic stroke is uncontrolled high blood pressure.

The good news is that, compared to older people, younger stroke patients tend to bounce back and recover better. "Younger patients' brains tend to be more resilient," says Pierre Fayad, MD, professor of neurology and director of the Stroke Center at the University of Nebraska Medical Center in Omaha. "Other parts of the brain help with recovery and make up for the deficits from the stroke. They usually don't have heart conditions or arthritis that can impair their physical therapy, and they often have more drive and much more potential for recovery."

Why is the incidence of stroke increasing in young people? A handful of medical, socioeconomic and lifestyle factors seem to have a significant influence.

"Younger people are less likely to call 9-1-1 for stroke-like symptoms because they don't believe they are at risk of a stroke," Fayad says. When they arrive at the emergency room, a stroke diagnosis is often delayed or the stroke is misdiagnosed as a migraine because "stroke is still considered a disease of the elderly, and young patients may not have the vascular risk factors that raise the suspicion for stroke," he says.

The rising rates of obesity in young adults have led to more diabetes, and diabetes increases the risk of ischemic stroke in the young. Young adults are almost twice as likely to lack health insurance coverage as compared to older adults and therefore do not get proper preventative care.

Young women tend to have more strokes than young men. The risk of stroke increases with the use of birth control pills. Stroke risk also rises with cigarette smoking and teenage girls are among the largest group of new smokers. Migraine with aura also increases the risk of stroke, especially among women under 45, cigarette smokers and those who use hormonal birth control.

A family history of high blood pressure matters as well. "If high blood pressure runs in your family, you need to monitor your blood pressure enough to heed it and treat it," Fayad says "If your mother had high blood pressure during pregnancy, monitor your blood pressure if you become pregnant." He recommends that young women who have high blood pressure during pregnancy work closely with their doctor to manage it.

The prevalence of stroke risk factors may be higher in older adults, but "increasing numbers in the younger population have adopted a sedentary lifestyle, have become obese, have diabetes, use illegal drugs, drink alcohol in binges and smoke cigarettes, all of which increase their risk of stroke," Fayad says. Simple modification of risk factors can lessen the risk of stroke. "Don't smoke, get regular physical activity, maintain a good weight, eat a low-salt diet with less red meat and fatty foods and more fruits and vegetables and lower your cholesterol and blood sugar levels," he says.