



Stroke

Stroke is a “brain attack”. A stroke occurs if the flow of oxygen and nutrient-rich blood to a portion of the brain is interrupted, for example if an artery is blocked. A transient ischemic attack (TIA), or “mini stroke”, is caused by a temporary blockage. If blockage persists, brain cells start to die within minutes, resulting in an area of ischemic stroke. Less frequently, sudden bleeding in the brain from a leaking or ruptured blood vessel may damage brain cells and create a hemorrhagic stroke. When brain cells are injured during a stroke, abilities controlled by that area of the brain e.g. muscle control, speech and memory are impaired. **Stroke is an emergency.**

Risk Factors

Most cases of stroke are multifactorial.

Inheritance: *Family history of stroke raises an individual’s risk. Some strokes may be symptoms of specific genetic disorders.*

Age: *Risk is highest for the elderly but a lot of people under age 65 have strokes. The chance of having a stroke approximately doubles for each decade of life after age 55.*

Gender: *Men have more strokes, but women have deadlier strokes. Use of birth control pills, pregnancy, history of preeclampsia/eclampsia or gestational diabetes, and post-menopausal hormone therapy may pose special risks for women.*

Race: *Non-caucasian minority groups tend to have higher risk of stroke, earlier occurrence of stroke and more severe stroke than their caucasian counterparts. This is thought to be partly due to higher occurrence of certain medical conditions, factors such as obesity, and poorer access to healthcare.*

Health and lifestyle: *Medical conditions such as high blood pressure, atrial fibrillation, diabetes, coronary artery or carotid artery disease, high cholesterol, prior TIA or prior stroke, and lifestyle factors such as smoking, excessive alcohol intake, sedentary life and obesity in mid-life all increase risk of stroke.*

Treatment

Prompt treatment can reduce damage to the brain and help avoid lasting disabilities, and may also help prevent another stroke. There are increasingly better medical, neuro-radiological and surgical options to remove and dissolve arterial blockage, to stop bleeding and to improve blood flow to affected brain regions.

Immediate response and rapid stroke treatment can save brains and lives.

Risk Reduction

50-80% of strokes are thought to be preventable. Many risk factors can be controlled before they cause problems. Preventing and managing the medical conditions noted above, and maintaining a healthy lifestyle, especially from mid-life onwards, are associated with reduced risk of stroke. Thus there are recommendations for regular medical care, physical exercise, maintaining a healthy weight, not smoking, limiting alcohol consumption and eating a healthy diet.

(From: National stroke association, National Institutes of Health, American stroke association)