

Stroke: Risk factors and prevention

Madam, Pakistan is the sixth most populous country in the world with an estimated population of approximately 167 million as of July 2008. There are no sizeable community based epidemiologic studies on stroke from Pakistan. Stroke is the third most common cause of death and the first leading cause of disability in the developed and developing countries. According to World Health Organization, 5.5 million people died of stroke in 2002, and roughly 20% of these deaths occurred in South Asia. Estimated annual incidence is 250/100,000, translating to 350,000 new cases every year. At a major University hospital with a busy Neurology service in Karachi, 519 patients with stroke were admitted over a 22 month period.¹

Some stroke risk factors are hereditary. Others are a function of natural processes. Still others result from a person's lifestyle. You can't change factors related to heredity or natural processes, but those resulting from lifestyle or environment can be modified with the help of a healthcare professional.

The chances of stroke after 55 years increase.² It tends to occur more in men and if there is a prior history of stroke or heart attack then the chances increase further. Transient ischaemic attacks (TIAs) are "warning strokes" that produce stroke-like symptoms but no lasting damage. TIAs are strong predictors of stroke. A person who's had one or more TIAs is almost 10 times more likely to have a stroke than someone of the same age and sex who has not.² These factors cannot be changed.

But there are a lot of risk factors which can be controlled. High blood pressure is the leading cause of stroke and the most important controllable risk factor for stroke. In recent years, studies have shown cigarette smoking to be an important risk factor for stroke. The nicotine and carbon monoxide in cigarette smoke damage the cardiovascular system in many ways.² Use of birth

control pills and pregnancy pose special stroke risks for women.² Diabetes is an independent risk factor for stroke. Many people with diabetes also have high blood pressure, high blood cholesterol and are overweight. This increases their risk even more.

People with coronary heart disease or heart failure have a higher risk of stroke than those with hearts that work normally. Dilated cardiomyopathy, heart valve disease and high blood cholesterol also raise the risk.² Diets high in saturated fat, trans fat and cholesterol can raise blood cholesterol levels. Diets high in sodium (salt) can contribute to increased blood pressure. Diets with excess calories can contribute to obesity. Alcohol intake and drug addiction are other causes of stroke.²

We can prevent stroke at our household level by taking fresh fruit and vegetables. There is a 26% scaling down in the risk of stroke if a person were to consume about five portions per day of fruits and vegetables, while between 3 and 5 portions reduce down the risk by 11%.³ Vegetables are rich in folate, fiber, potassium, and antioxidants. Dietary fiber and potassium reduce the chances of stroke by decreasing the risk of cholesterol and blood pressure. Such positive diet modifications can significantly reduce the risk of stroke in our population.

Muhammad Owais Khan
4th Year Student, Dow Medical College.

References

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