

Stroke is a medical emergency

Disorder: Stroke

Ms Karen Borschmann

Physiotherapist and PhD candidate

The Florey Institute of Neuroscience and Mental Health

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Stroke is a serious medical emergency. A stroke is what happens when the supply of blood to the brain is interrupted, leading to the death of brain cells. Stroke affects 1 in 6 people during their lifetime [1] – that is 50,000 Australians every year. Stroke is the second most common cause of death after heart disease and is a leading cause of disability of people in our community [2]. The majority (65%) of people living with stroke require some level of assistance to undertake daily activities [3]. Stroke is more common in older people, but can affect people of any age.

There are two main causes of stroke – blockage of blood vessels (ischaemic stroke) and burst blood vessels (haemorrhage). A transient ischaemic attack (TIA) is what occurs when there is temporary disruption to the blood supply of the brain, with resolution of stroke symptoms within 24 hours. Common symptoms of stroke include weakness of muscles in the face and arm, and slurred speech. Other symptoms include weakness or numbness in other parts of body, changes in thinking and understanding, loss of vision, difficulty swallowing, sudden headache and dizziness.

Even if symptoms do resolve, this can be a warning sign for future stroke. It is critical that emergency medical attention is sought if you suspect that you or someone you know experiences stroke symptoms. Initial medical attention will focus on determining whether it is a stroke which has caused these symptoms, and providing medical intervention and monitoring. Some treatments such as the “clot busting” medication *tissue plasminogen activator* (tPA) can only be given in the first few hours of symptoms. Also, the longer that the blood supply is interrupted, the more brain cells die. That is why it is important not to delay medical attention.

Signs of stroke are summarised in the FAST test [4]. It is important for everyone to recognise the FAST symptoms in order to minimise damage to the brain caused by stroke.

Face: has their mouth drooped?

Arms: can they lift both arms?

Speech: Is their speech slurred? Do they understand you?

Time: Is critical. If you see any of these signs call 000 straight away.

Treatment of stroke may include surgery on blocked vessels, medication including aspirin, and rehabilitation from stroke team staff including dieticians, doctors, occupational therapists, physiotherapists, psychologists, social workers and speech pathologists. People who are treated for stroke on a dedicated stroke unit tend to have better recovery than people who are treated on a general medical ward of the hospital.

There are a number of risk factors for stroke, many of which are modifiable by making changes in your lifestyle. Having high blood pressure and high cholesterol causes damage to blood vessels

which can increase stroke risk. Stopping cigarette smoking, maintain a healthy body weight, limiting alcohol intake, and eating a balanced diet of fresh food is recommended to manage blood pressure and cholesterol and reduce risk of stroke. People who undertake moderate amounts of exercise are less likely to have a stroke. Other medical conditions including irregular heart rate (atrial fibrillation) and diabetes also increase stroke risk, so it is important to work with your health care team to carefully manage these conditions.

Experiencing stroke can be very difficult and life changing for people with stroke and their family and friends. Health professionals, doctors, social groups and support groups can be beneficial during life after stroke. Rehabilitation after stroke starts very soon after hospital admission, and recovery after stroke can continue for years. Stroke research is continuing to develop our understanding of the way that the brain functions and how it can recover after stroke, in order to develop evidence for best practice rehabilitation.

1. *Seshadri, S. and P.A. Wolf, Lifetime risk of stroke and dementia: current concepts, and estimates from the Framingham Study. Lancet Neurol, 2007. 6(12): p. 1106-14.*
2. *Australian Institute of Health and Welfare, Australia's Health. 2012.*
3. *Deloitte Access Economics, The economic impact of stroke in Australia. 2013.*
4. *National Stroke Foundation. Signs of Stroke FAST. 2012 [cited 2013 28/6/13]; Available from: <http://strokefoundation.com.au/what-is-a-stroke/signs-of-stroke>.*