



TREATMENT

A Stroke is a medical emergency. It is a life-threatening situation with approximately 25% of Strokes being fatal. Immediate treatment can save lives and reduce disability. Treatment varies, depending on the severity and cause of the Stroke. All Strokes require medical treatment. For the vast majority of Strokes hospitalisation is required, possibly including intensive care and life support.

Stroke treatment is changing with medical advancement occurring all the time. It is important, if a Stroke is suspected, to take the person to the emergency room immediately. Medical tests will be undertaken to determine if he or she is having a bleeding Stroke or a Stroke from a blood clot. Once the type and severity of the Stroke has been established by the medical team, treatment can begin.

TYPES OF TREATMENT

The hospital Stroke team will determine the most appropriate form of treatment and care based on the results of the medical test they have undertaken. This may include:

- Medications,
- Surgery,
- Stroke Unit or Hospital Care (See; 'What to Expect' Stroke Units),
- Rehabilitation (See; 'Rehabilitation').

Medications

tPA (tissue plasminogen activator)

This is a relatively new treatment for Stroke and is administered under very strict guidelines as to who is eligible to receive thrombolytic medicine. The most important thing is that the person be evaluated and treated by a specialised Stroke team within 3 hours of the start of the symptoms.

Thrombolytic medicine, tPA, breaks up blood clots and can restore blood flow to the damaged area. Research has indicated that people who receive this medicine are more likely to have less long-term impairment.

If the Stroke is caused by bleeding (Haemorrhagic) rather than clotting (Ischaemic), this treatment can make the damage worse - so care is needed to correctly diagnose the cause of the Stroke.

Blood thinners such as heparin and coumadin are used to treat Strokes. Aspirin and other anti-platelet agents may be used as well.

Types of Treatment

PLEASE TURN OVER



Other medications may be needed to control associated symptoms.

- Analgesics (pain killers) may be needed to control severe headache.
- Anti-hypertensive medication may be needed to control high blood pressure.

Nutrients and fluids may be necessary, especially if the person has swallowing difficulties. The nutrients and fluids may be given through an intravenous tube (IV) or a feeding tube in the stomach. Swallowing difficulties may be temporary or permanent.

For Haemorrhagic Stroke, surgery is often required to remove pooled blood from the brain and to repair damaged blood vessels.

Life support and coma treatment are performed as needed.

Surgery

When the carotid artery in the neck is partially blocked by a fatty build-up, called plaque, surgery called **carotid endarterectomy** might be used to remove the accumulated plaque.

Cerebral angioplasty is another technique in which balloons, stents and coils are inserted to treat some problems within the brain's blood vessels. Its use depends on its safety and effectiveness.

The treatment for Haemorrhagic Stroke is quite different to Ischaemic Stroke:

- For **small bleeds**, they are often watched and allowed to heal on their own.
- In the case of a large bleed or if the Stroke extends or appears to be getting worse, **surgery** may be done to 'decompress' the brain – release the blood which has built up, causing swelling. This takes up space in your brain squeezing it against the skull. Surgery is undertaken to drain or remove blood in or around the brain that was caused by a bleeding blood vessel.
- A Haemorrhagic Stroke may be caused by a brain aneurysm. If this occurs a surgeon may perform **endovascular coil embolisation** to repair the weak artery. A small coil is inserted into the aneurysm to block it off. The location of the aneurysm, its size and your general health are used to determine if the surgery can be performed.
- An **arteriovenous malformation** is a congenital disorder that causes an abnormal web of blood vessels and veins in the brain, brain stem, or spinal cord. The vessel walls of an arteriovenous malformation may become weak and leak or rupture. Surgery may repair abnormally formed blood vessels (arteriovenous malformations) that have caused bleeding in the brain.

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