

IST-3 Trial confirms benefit of clot-busting treatment

Two important recent research studies have confirmed the benefit of clot-busting treatment (thrombolysis) for patients with an acute ischaemic stroke. The IST-3 study, the world's largest ever trial of the drug rt-PA in stroke, which is given to patients as soon as possible after stroke onset, showed that treatment within the first few hours improves recovery after stroke. The drug is given by injection. The benefits were greatest for the patients who could be treated within the first three hours. For every thousand patients treated within the first three hours eighty more will live without help from other people than if they had not been given the drug.

Older people benefit too

The trial also showed that older people, including those aged over eighty years, benefit as much as younger people. Up until now rt-PA treatment has not been approved in Europe for use in people over 80 years old.

Balancing risk and benefit

Although rt-PA improves patients' recovery, it is associated with an increased risk of early bleeding, particularly increased bleeding into the brain, which may occasionally be fatal. Stroke experts stressed that this risk needs to be balanced with the damage if the stroke is not treated. Without treatment about one third of people who suffer a stroke die, with another third left permanently dependent and disabled. The treatment does not increase patients' risk of dying over the first six months. Because of the threat of disability, many stroke patients are prepared to take the risks of early bleeding with rt-PA to improve their chances of avoiding disability, and being able to live independently. [avoid repeating 'early']

Study confirms earlier results

A second important study put together the results of all of the previous trials of rt-PA together with those of IST-3. It is now clear that a wide variety of patients benefit from this treatment, but for the benefit to be greatest the sooner treatment is given the better. With treatment, disability in survivors is reduced and more patients make a complete recovery.

If I have a stroke, how do I decide whether to have clot-busters?

It is however important to realise that not all patients with a stroke are suitable for this treatment. Some patients with very mild stroke may consider that the risk of bleeding outweighs the possible benefits for them. Some patients may not recognise that their symptoms are due to a stroke until some hours after the "window of opportunity for treatment" has closed. Many people wake from overnight sleep with their stroke symptoms. In this situation it is not usually possible to know when the stroke started, so treatment with rt-PA cannot be used. About one in six strokes are not due to a blocked artery in the brain, but are caused by bleeding. People with stroke due to bleeding in the brain must avoid clot-busting treatment, since it will make the bleeding much worse. However, for most patients with a disabling stroke due to a blocked artery,

including those aged over eighty, the benefits of treatment outweigh the risks; even more so if treatment can be given within three hours of the time the stroke symptoms began.

Suspected stroke? Act FAST

Taken together, these two studies mean that campaigns to inform the public about symptoms of stroke and the need for urgent action (such as the FAST campaign run by the Stroke Association and Chest, Heart & Stroke Scotland) are important. FAST stands for: Face - can they smile? Does one side droop? Arm – Can they lift both arms? Is one weak? Speech – is their speech slurred or muddled? Time – to call 999. Patients who believe they are suffering an acute stroke should seek urgent medical attention. Hospital systems are being geared up to make sure that patients with suspected stroke are assessed promptly and receive a brain scan, which is necessary before decisions can be made about treatment. Those that might benefit from rt-PA are speeded through the system to ensure that they get treatment at the earliest possible opportunity.

Think ahead

The take-home message is therefore: if you have a suspected stroke, get to A & E quickly so that treatment can be started straight away. Also, if you are at high risk of stroke, especially if you have had a TIA (Transient Ischaemic Attack), think about your treatment choices in advance, so that you can make an informed decision promptly if and when the time comes.

Have a smartphone?

To download a free APP, for your iPhone or Android phone, to help identify a possible stroke, and to take appropriate action, go to http://www.chss.org.uk/about_us/campaigns/fast.php