Further information and contact details:



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Hypothermia for Acute Ischaemic Stroke Trial

– Pilot Phase

PARTICIPANT INFORMATION SHEET

A pilot phase trial testing the use of cooling as a potential treatment for ischaemic stroke.

Chief Investigator: Dr Malcolm Macleod

Invitation to take part in the Hypothermia for Acute Ischaemic Stroke Trial

You are being invited to take part in a research trial testing the use of surface cooling in patients with ischaemic stroke. Before you decide whether to take part it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and to discuss it with others if you want to. Please ask us if there is anything that you do not understand about the trial or if you would like more information. Thank you for reading this information leaflet.

Introduction to the trial

Your hospital doctor will have told you that you have had an ischaemic stroke. This has been caused by a blockage in an artery that has stopped the bloodflow to part of your brain. This can cause weakness, numbness, visual problems and/or difficulty with speech and language. The blockage or weakness does not necessarily mean that the damage in the brain is permanent, and we know from previous research studies that certain treatments can improve the outcome for patients like you.

However, the treatments that we have are not suitable for all patients so we are very keen to develop and test new treatments so that more patients can be successfully treated.

The Hypothermia in Acute Ischaemic Stroke Trial will be carried out in two phases. The first phase (this phase) is a pilot research trial to help us find out the best temperature and length of time for cooling patients. This is the phase we are inviting you to take part in. The second phase will be a larger, international trial using the best temperature and cooling time identified in this trial to improve outcome after an acute

ischaemic stroke. Data from your participation in this pilot phase will also be used in the main phase to increase the size of the whole trial.

What is therapeutic hypothermia?

Therapeutic hypothermia is when the body temperature is deliberately lowered. In this trial we will give cold salt water through a drip to reduce the body temperature, and then keep the temperature down using a set of cooling blankets which will be placed on the chest and thighs.

Do I have to take part?

It is up to you to decide whether or not to take part. If you decide now to take part you are still free to withdraw at any time and without giving a reason. This will not affect the quality of care you receive. If you do decide to take part you should keep this information leaflet.

What will happen to me if I decide to take part?

If you decide to take part, we will ask you to sign a consent form. With your consent, we will let your family doctor know you are taking part in the trial. Therefore, a copy of the consent form will be sent to your family doctor together with a copy of this information leaflet. If, during the course of the trial, a patient loses their ability to make decisions then we will continue to collect their information and use it for analysis. The patient will continue to receive best medical treatment at all times.

Taking part in the trial will not prevent you receiving any other treatment which the doctors think will benefit you.

You will be randomised (chosen by chance like tossing a coin) to either "best medical care" alone or to "best medical care" and

hypothermia treatment. To make sure that the trial is not biased, neither you nor your hospital doctor can decide which group you will be in – this will be decided by a computer. In this trial twice as many patients will be cooled as will get "best medical care" alone, so your chances of getting cooled are 2:1.

A total of 24 ischaemic stroke patients will be involved in this Edinburgh pilot and will be randomised into either a control group (best medical care alone) or to one of the following four groups:

- Group A: 35 ℃ maintained for 12 hours
- Group B: 33 ^oC maintained for 12 hours
- Group C: 35 °C maintained for 24 hours
- Group D: 33 °C maintained for 24 hours

Everyone who takes part in the trial will have a computerised tomography (CT) scan at the beginning of the trial as part of their normal care, a magnetic resonance imaging (MRI) scan three hours after being randomised, then an extra CT and MRI scan seven days later. The MRI scan will last approximately 40 minutes, and as well as showing us the structure of the brain will also tell us about brain temperature. The CT scan lasts about 20 minutes.

You should be aware that there is a small possibility (about 3%) of a significant abnormality being found in your MRI scan, which may need to be acted upon, or your family doctor told about, in case of any future illness. Your hospital doctor or the research centre Radiologist will be happy to discuss this further with you if you wish.

Blood samples will be collected on five occasions, to see if we can find blood markers of brain injury, and to see if differences in people's genetic makeup influences how well they might respond to the treatment.

Heart tracings (ECGs) will be done at 6, 12 and 48 hours.

Patients being cooled will be cared for in the High Dependency Unit where they will be monitored closely at all times. Patients not being cooled will be cared for in the stroke unit ward and will receive the same level of care appropriate to their needs.

Patients randomised to receive hypothermia treatment:

Cooling will be started within 90 minutes of hospital admission, using an intravenous drip of cooled normal saline given over 30 minutes. This will be followed by cooling using cooled pads placed on the surface of the body – the Arctic Sun device. Sometimes being cooled makes people feel cold and makes them shiver. We will try to minimise this, firstly by giving you woolly socks, gloves and a woolly hat to wear, and secondly by giving you an infusion of a drug called pethidine. Pethidine is a commonly used drug, but it can have side effects in some patients including drowsiness, nausea, constipation, headache, change in heart rate or euphoria. If you do suffer shivering, the dose of this drug can be increased, and if it is still a problem then we can stop the cooling.

After cooling for 12 or 24 hours has stopped, you will be warmed gradually to 36°C. This might take up to 10 hours, depending on the temperature you were cooled to.

Oesophageal (gullet or lower throat) temperature will be measured throughout the cooling and warming periods. This is done using a very fine tube, with a small temperature probe at the end, which is passed through the mouth and down into the lower throat. Regular monitoring of tympanic (ear) temperature will also be recorded together with blood pressure and heart rate.

After 7 days, or when you are discharged from hospital, a research nurse will ask you some questions about your

experience of being in the trial and of being cooled, and anything that you found to be particularly unpleasant. This is so we can refine the cooling strategy if necessary.

One-month and three-month follow-up:

You will be seen and interviewed by a research nurse at one and three months after your stroke.

What are the possible disadvantages and risks of taking part?

Cooling the body down to 35°C and 33°C can cause skin redness and there is a small chance of the skin breaking down. During the time that the body is cooled, there is also a low but increased risk of having an irregular heartbeat, low blood pressure or problems with blood clotting. There is also a risk of low blood pressure during warming which is a reason why the body is warmed slowly. These are well known side effects of cooling and, if you are put into the hypothermia treatment group, you will be very closely monitored all the time by appropriate machines and specially trained nurses.

All stroke patients are at some risk of infection, and it may be that those risks are increased by hyporthermia. We will therefore monitor this very closely, and take appropriate action if infection occurs.

What are the possible benefits of taking part?

We already know that reducing brain temperature can be very helpful in other forms of brain injury, including in people who have a cardiac arrest and in children with birth injuries. We also know that, in general, stroke patients with high temperatures tend to do less well, and stroke patients with below average temperatures tend to do better.

If you are put into the cooling group this treatment may help to reduce the spread of the damage around the affected area of the brain. We cannot say whether this trial will help you but we hope that the treatment given will assist your recovery.

This trial allows best medical care to be given to everyone who takes part. No matter which group you were put into, you will receive the best care available based on current knowledge.

The information that we get from this trial will help us to find out the best treatment for people with acute ischaemic stroke in the future.

Future research projects

If you take part in this study the data we collect now for the trial is important and could help in future related research projects. Therefore, your medical records and anonymised sample data may be re-accessed for future related research projects.

The samples collected will initially be stored in Edinburgh but may be sent to other researchers for future analysis. None of the samples will contain information or labelling that will allow you to be identified to anyone not involved with this trial. If samples are used in future related research projects they will be completely anonymised before being used.

What if there is a problem?

If you have a concern at any time about any aspect of this trial, you should ask to speak to your hospital doctor or the Hypothermia in Acute Ischaemic Stroke Trial (contact details on the back page of this leaflet) who will do their best to answer your questions. If you remain unhappy and wish to complain formally, you can do this through the hospital trust Complaints Procedure. Details can be obtained from the ward nurse.

In the event that something goes wrong and you are harmed during the research due to negligence of the investigators or the design of the trial, then you may have grounds for legal action, but you may have to pay your legal costs. If you wish to complain, or have any concerns about any aspect of the way you have been approached or treated during the course of this trial or the future related clinical research projects, then the normal National Health Service complaints mechanisms will be available to you.

Who will be told about my participation?

Only information necessary for the purposes of the trial and future related clinical research projects will be collected from you and your medical records. Any information provided will be entirely confidential and only available to members of staff directly involved in running the Hypothermia in Acute Ischaemic Stroke Trial and future related clinical research projects together with your hospital doctors and the research staff working with them. Your family doctor will also be told that you are taking part and about the results of your scan if any abnormalities are found.

What will happen to the results of the research trial?

All information collected as part of this trial and future related clinical research projects will be treated as confidential. Individuals will not be identified in any trial reports or publication of the results.

The Hypothermia in Acute Ischaemic Stroke Trial pilot phase data will be included in the main phase. The results of the main phase will be made known as widely as possible. This may be through publication in medical journals, presentations at conferences or through other appropriate media. Your data will not be personally identifiable in any way.

Who has reviewed the trial?

The Hypothermia in Acute Ischaemic Stroke Trial has been assessed by an independent group of people, called a Research Ethics Committee, to protect your safety, rights, wellbeing and dignity. The trial has also received hospital management approval.

Who is organising and funding the research?

The Hypothermia in Acute Ischaemic Stroke Trial pilot is organised by the University of Edinburgh. It is funded by Chest Heart and Stroke Scotland.

And finally ...

If you think of other questions that you want to have answered please ask your hospital doctor who will be happy to help. The name of your hospital doctor and their contact telephone number are shown on the back page of this leaflet.

Thank you for taking the time to read this information leaflet.