



**NEST Study Results
Parents Newsletter
Autumn 2013**

The NEST Study



We are very pleased to be able to tell you that we now have the results of the NEST Study and our findings have been published in the journal Pediatrics.

Without your support, your family and others like you, we would not have been able to complete this important study and so we want to share the results with you.

You will remember the aim of the NEST Study was to find out whether or not cooling babies who receive ECMO (Extra-Corporeal Membrane Oxygenation), improves the later health and development of the babies. In order to find out, we compared 'standard ECMO treatment' with 'ECMO treatment plus cooling'.

How was the Study organised?

There were four ECMO centres based in the UK and they all took part. One hundred and eleven babies were recruited to the study over a four-year period. Babies were randomly allocated to receive ECMO plus cooling or conventional ECMO care.

Babies who were in the cooled group had their body temperature reduced to 34°C for the first 48-72 hours of ECMO followed by gradual rewarming. Babies who were in the conventional care group had their temperature maintained at the normal level of 37°C.

We collected information about each baby's stay in hospital and from a paediatrician who assessed the children at around their second birthday. These assessments mostly took place in hospital outpatient departments, a few were held at the child's home.

Sadly not all babies lived to be followed up and our deepest condolences go to their families.

A BIG THANK YOU...

The NEST Study team wish to express their gratitude to all the families who took part in this study under extremely stressful circumstances shortly after their baby's birth. We also appreciated very much that most families continued to support the study in the follow-up phase. Our sincere thanks must also go to all the neonatal units and staff who took part in the study so enthusiastically, and contributed to its success.

Thanks to you all!

FINDINGS

The Study showed quite clearly that cooling babies during their ECMO treatment did not result in improvements in their later health and development. This is valuable information that will help guide clinicians who provide ECMO treatment to babies in the future.

In some situations we do know that cooling has some benefits, but babies who need ECMO are a very special group with particular treatment requirements. The information we now have from the NEST Study will ensure that clinicians will no longer spend time wondering if cooling might be advisable for babies being treated with ECMO.

All the information collected was analysed and there was no difference between the two groups in the end. The number of babies in the study makes it very unlikely that the findings have happened by chance.

Treatment allocation and your baby

Where or not your baby was cooled, we must remember that at the time the Study was developed and given funding, nobody knew what the answer would be but many doctors were asking the question. With your help this very important question has now been answered.

Both the cooled group and the non-cooled group of babies are equally important to the study.

Publication of the NEST results

The results of NEST have been published in Pediatrics. The article can be accessed online at:

<http://pediatrics.aappublications.org/content/early/2013/10/16/peds.2013-1754>.

If you would like to be sent a copy of the full paper please contact the NEST Co-ordinating Office (the address is at the end of this leaflet) or email ann.kennedy@npeu.ox.ac.uk.

As a result of this research, doctors are in a position to offer care to babies who receive ECMO that is based on good evidence, evidence that you helped us to provide.

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