

PARENT'S NEWSLETTER 2017

ICISS – a total of 377 children enrolled – and we have some important results to share with you !

ICISS – now the largest international trial investigating infantile spasms ever to have been undertaken

Dear Parents,

- First of all a massive **thank you** to you all for agreeing to take part in ICISS.
- You have helped us to become the largest ever clinical trial investigating infantile spasms.
- A total of 377 children have been enrolled into the trial and we hope that all the data we have obtained will help shed more light on the optimum treatment for this condition in the future.

Why does it take so long to know the results?

- We apologise that it has been a long time since we sent out our previous newsletter.
- We have been extremely busy recruiting all the cases and then processing all the data.
- Before any results from the trial can be produced and published, the data for every case has to be entered on computer.
- All the data has to be sent to us by your doctor and it is then checked by Prof Osborne and any queries answered before it is signed off by him for entry onto our database.
- Data is entered on the computer twice (by 2 different people) – this is called double entry. It reduces the number of data entry errors as it shows any differences between the first and second entry. This allows the correct data to be stored in the database.
- As a final check of the data, all the data in the database on the computer is then checked against the original data on the paper forms supplied by the doctors – this is called data validation.

- If any errors are found in the computer data, the data is then corrected by Dr O'Callaghan or Prof Osborne. A record of this data change is kept in a paper file.
- All this work shows that the data to be used for analysis is both correct and accurate.
- We have been very busy getting the data ready for presentation at scientific conferences and most importantly publication in a scientific journal.
- Dr O'Callaghan and Prof Osborne have been busy writing a paper about the initial results from the study and submitted them for publication to a very prestigious medical journal called The Lancet Neurology
- We are delighted to tell you that this paper has now been accepted and published by The Lancet Neurology, so we are now able to share these important results with you.

What have we found regarding stopping the spasms?

- The main aim of the study was to investigate if vigabatrin and hormonal treatment (either prednisolone or tetracosactide depot) given together (combined treatment) was better at stopping the spasms than giving just hormonal treatment alone.
- Between March 2007 and May 2014, 377 children (210 boys and 167 girls) were given a randomised treatment at 102 hospitals in five countries (Australia 3, Germany 11, New Zealand 2, Switzerland 3 and UK 83)
- In ICISS stopping the spasms was defined as absence of spasms for a four-week period

from Day 14 to Day 42 after the initiation of treatment.

- Stopping the spasms occurred in 133 of 186 (71.5%) on hormonal treatment with Vigabatrin (combination therapy) and in 108 of 191 (56.5 %) on hormonal treatment alone. This result was highly statistically significant which means it is extremely unlikely to have occurred by chance and therefore almost certainly represents a real difference between the two treatments.
 - In addition, spasms stopped faster on Hormonal treatment with Vigabatrin than hormonal therapy alone
 - Therefore, the results from our study show that vigabatrin and hormonal treatment given together is much more effective at stopping the spasms than hormonal treatment alone
 - Adverse reactions (side effects) are a problem with both treatments but do not seem to be more of a problem with combination therapy.
 - Because giving Hormonal treatment with Vigabatrin does not increase side effects, this means it is as safe a treatment to give as hormonal therapy alone.
- #### Spasms stopped plus EEG no longer abnormal
- One of the other aims of the study was to look for those infants where the spasms stopped and also the EEG (the electroencephalogram which measures the electrical activity in the brain) was no longer significantly abnormal.
 - We call this an Electro-clinical response. It was defined as stopping the spasms and

improving the EEG so that the EEG also suggested that the spasms had gone.

- Electro-clinical response was achieved in 227 of the 374 infants in whom both spasms and EEG results were available.
- A greater number of children who were given combination therapy [123 of 185 (66.5%)] achieved this “electro-clinical response” than those who had hormonal therapy alone [104 of 189 (55.0%)]. Again, statistical analysis showed that this result was extremely unlikely to have occurred by chance.
- So, our results show that hormonal treatment with vigabatrin given together is much more effective at stopping the spasms during the first 42 days and improving the EEG than giving hormonal treatment alone.

What does this all mean?

- It means that in the future, doctors may well choose to prescribe hormonal treatment with vigabatrin to treat infantile spasms.
- Therefore, this result is a major advance and should improve the treatment of children with infantile spasms in the future.
- It is only due to your help that we have been able to find this important result - so many thanks to you all for participating.

What results from the study are you planning to publish next?

- The other main aim of our study was to look at development at 18 months of age and to see if there is any difference in development between the children given hormonal treatment with Vigabatrin and those given hormonal treatment alone.
- All the Vineland Developmental assessments at 18 months of age have now been completed.
- Therefore, this is now the focus for our next stage of analysis and publication.
- We hope to have a paper on this ready to be submitted in the

Spring of 2017. But it may take longer.

- We will write to you to let you know about these results as soon as we can after the results have been accepted for publication.

Recent presentations by the ICISS team

- To inform other clinicians about the study and discuss the results with them, Dr O’Callaghan has presented the study at the following medical and scientific meetings and conferences:
- The 2015 Annual Meeting of the British Paediatric Neurology Association.
- The 2015 Annual Meeting of the UK Royal College of Paediatricians and Child Health
- The 2015 Annual Meeting of the European Paediatric Neurology Society
- The 2015 Annual Meeting of the American Epilepsy Society
- The 2016 Annual Meeting of the British Paediatric Neurology Association
- The 2016 Annual meeting of the Australia and New Zealand Paediatric Neurology Society

Where can I get a copy of the Lancet Neurology paper if I want one?

- If you would like a copy of the paper that has just been published in The Lancet Neurology, please contact us via the email address below.
- We will then make a note to send you a copy of the paper as soon as we can.
- We are currently in the process of ordering copies of the paper.

Is the study still running?

- Yes – the study is still running.
- Enrolment into the trial ended on 30 May 2014
- As you know, we are following up all the children at 18 months of age and then again at 42

months of age to check on their development.

- We also check on any epileptic fits the children may be having.
- These assessments at 42 months of age are due to end in the middle of 2017.
- We will then have to enter the data on our computer and validate that data.
- Only then can we analyse the data and publish those results.

When does the study end?

- The study will formally end on 31st December 2017.
- Then we expect to publish more papers during 2018.

Contact

- If you wish to contact us, please email:
iciss@ruh-bath.swest.nhs.uk
and also feel free to look at our website at:
www.iciss.org.uk

THANKS AGAIN TO ALL OF YOU FOR HELPING US WITH THIS RESEARCH



The ICISS Trial Centre, The Children’s Centre, Royal United Hospital, Combe Park, Bath BA1 3NG, United Kingdom.

Fax: + 44 1225 821432

Email: iciss@ruh-bath.swest.nhs.uk

Web: www.iciss.org.uk