

UK Meningitis Study

December 2013

Welcome to the sixth edition of the Meningitis
NW newsletter

Dear Colleagues,

Welcome to the **6th** edition of the Meningitis NW newsletter which is also the **1st** edition of the UK Meningitis newsletter! Just like King James **6th** of Scotland became James the **1st** of England (and Great Britain) the Meningitis study is expanding to take in the whole of the United Kingdom.

It has been some time since I last updated you all. As many of you will know I (Fiona) have been awarded an NIHR doctoral fellowship to look at improving the diagnosis of meningitis. More details on that on page 4.

Recruitment continues to be excellent and we are almost at 850, congratulations to you all. Please see the league table on page 2 to see how you compare to other sites. For this edition of the newsletter the league table is ordered by number of patients recruited per month open for recruitment. Well done to Leicester for being 'Star Recruiter'!

You can find out about some updated results on page 7 and some common data entry errors on page 6. Don't forget to put the dates in your diary. In particular we hope many of you will join us for NeuroID 2014 – this year the research will be entwined with the clinical updates.

Please also see page 5 for details of a new, exciting treatment trial that you may wish to be involved in. Let me know if you do and I can pass on your details.

Thank you again for all your help and support.




Fiona McGill
Research Fellow

Tom Solomon
Chief Investigator



League Table

Site	No. of patients recruited per month of site being open
Leicester 	3.35
Blackpool Victoria Hospital	3.14
Royal Liverpool	2.69
SJUH/LGI	2.56
MRI	2.48
East Lancs NHS Trust	2.45
Heart of England NHS Trust	2.12
James Cook university Hospital	1.93
Royal Preston Hospital	1.82
Bradford Royal infirmary	1.74
Stepping Hill	1.71
Countess of Chester	1.69
Arrowe Park	1.57
Salford Royal	1.42
Scarborough	1.35
Leighton hospital, Crewe	1.21
North Cumbria University Hospitals	1.16
Wythenshawe	1.03
Aintree Hospital	1.01
Mid yorks	1.00
Royal Lancaster Hospital	0.99
PAT	0.91
Huddersfield	0.89
Southport	0.79
Wigan infirmary	0.70
Newcastle Upon Tyne NHS Foundation Trust*	0.59
Macclesfield DGH	0.53
Warrington	0.46
Tameside DGH	0.45
Whiston	0.45
York	0.23
trafford general*	0.15
Royal bolton hospital	0.12
Walton	0.04

*no longer officially recruiting.

Figures correct at 5p.m. 13th Dec 2013



Researcher Spotlight

We would like to introduce you to some members of the wider UK Meningitis team so in this section we will put the spotlight on them!

Deven Williams has recently joined the team here in Liverpool as a research assistant. She is mainly helping out with identifying potential patients and data entry.

Name: Deven Williams



Where do you work? Royal Liverpool Hospital,

What is your job/role? Research Assistant,

What is your background? 2 years in Tropical and Infectious Diseases, New Member of The Brain Infections Group

What are your research interests? Encephalitis and Meningitis,

Name three things you like. Playing Princess with my daughter, Reading, Cycling,

And three things you dislike. Coffee, Getting up Early, Winter



The UK Meningitis Study – what's it all about?

Following on from the success that is the Meningitis NW Study we are pleased to announce the **UK Meningitis Study**. This is an expansion of the study to involve the rest of the UK to try and answer some important questions that the Meningitis NW Study has brought up.

The key objectives for the Meningitis NW study were around the epidemiology and outcomes of meningitis, particularly viral meningitis. The descriptive and epidemiological data is currently being analysed in preparation for publication and the outcome data is continuing to be collected. However, in interim analyses you will all be aware that **c.40% of patients with proven meningitis (as defined by >4 white cells in the CSF with a compatible clinical picture) never have a cause identified.**

The reasons for this are probably multiple but I, Fiona, have been awarded an NIHR fellowship to look at this more over the next 3 years. The main areas I will be looking at are:

- **What are the determinants of how medical staff request diagnostic tests?**
- **Can newer technologies improve the diagnostic yield?**
- **Are there any novel/unusual pathogens accounting for some of the undiagnosed cases?**

With regard to the second aim I will be utilising leftover CSF samples from some 600 patients to evaluate some newer diagnostic tests. Hence, the need to continue recruiting patients and to make the consent to gifting leftover samples compulsory (Substantial Amendment 12).

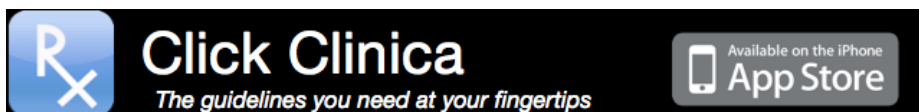
With regard to the first aim I will be aiming to interview medical professionals at all levels (F1 to consultant level) and will probably be asking for your help in that too. For those of you involved in the laboratory I will also be carrying out a couple of focus groups with laboratory staff so look out for requests for help.

The name on the UK portfolio has already changed and ethical approval has been granted.

Please do get in touch if you have any queries.



Improving the surveillance of infectious diseases - ClickClinica®. Dr Benedict Michael, a member of the Meningitis NW steering committee, has recently been awarded a **commendation** by the University of Liverpool for developing this free smartphone app that provides doctors with access to guidelines on all acute medical emergencies. In return it helps us gather information on disease activity in the UK and around the globe. The app has been featured in articles in the Guardian and the Lancet Infectious Diseases (<http://www.guardian.co.uk/science/blog/2012/nov/26/clickclinica-app-map-disease-outbreaks>). You can download it for free from the Apple app store. It will be available on the Android market soon. It is anticipated that this will provide epidemiological data on meningitis and improve recruitment to this study.



Please look at our website if you haven't already at www.braininfectionsuk.org/meningitisnw

Many of the documents needed for the study can be accessed from here. You can also have a look at the other studies in the Portfolio and see how they are doing at www.braininfectionsuk.org. This site also has a new educational section – NeuroID e-learning http://www.braininfectionsuk.org/neuroid_elearning/index.html.

Keeping up to date.

You can keep up to date with the goings on at the institute by 'liking' us on facebook or 'following' us on twitter.

Tri-Marathon – Due to an illness setback the third marathon has been delayed but Claire is back on track now and aims to complete her **third marathon in Anglesey** on 18th Jan 2014. It's not too late to sponsor Claire, you can do so by going to her justgiving page below.

www.justgiving.com/claire-matata1.

NEW STUDY

Do corticosteroids improve outcome in Herpes simplex virus encephalitis? As many of you will know this is a vexed question! We now have the chance to answer it.

We are planning a randomized controlled trial of dexamethasone in adults with HSV encephalitis which will roll out across the UK.

This is an important question and it's a relatively simple study to add to your portfolio. Unlike MeningitisNW, which we know involves lots of patients with suspected meningitis, the new treatment trial will ONLY be for those with PROVEN HSV encephalitis, so you are likely to see only 1-2 patients per year!

Please confirm you would like to know more by emailing encephuk@liv.ac.uk.



Common data errors

Whilst sorting through the data to analyse for the first part of the study I have come across some common data entry errors which I thought it would be good to highlight to try and improve for future:

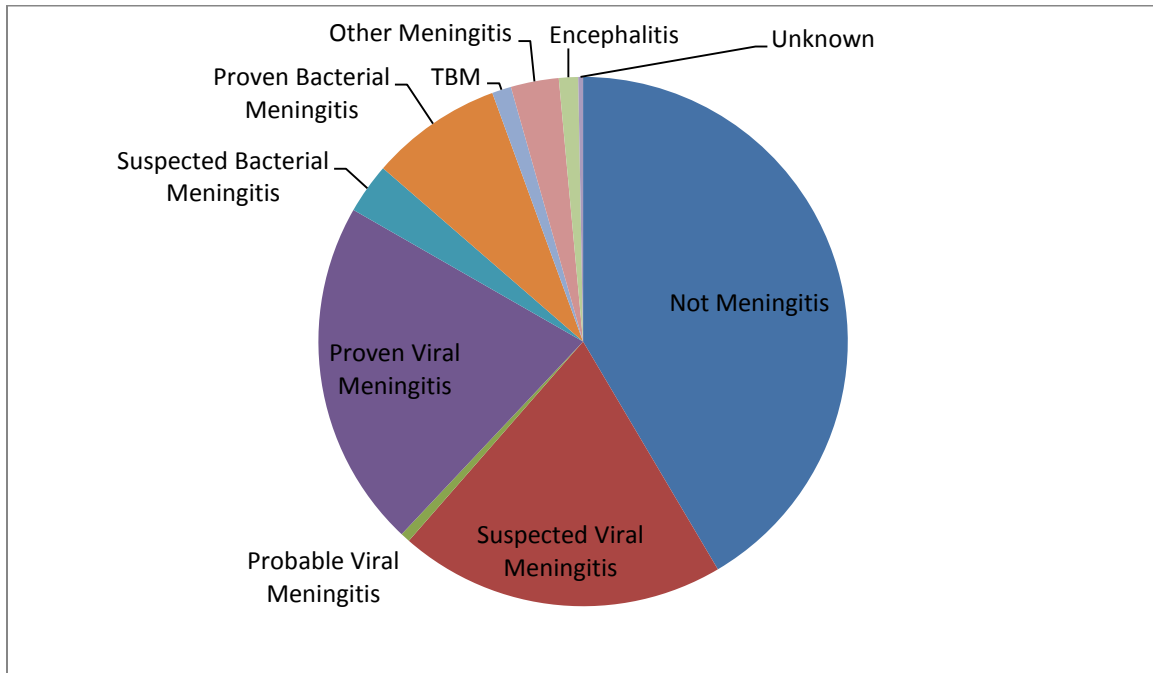
- **Often the blood glucose that was recorded was not done within 4 hours of the LP.**
 - Remember if there is not a blood glucose done within 4 hours of the LP then just record ND (not done) on the CRF.
- **The percentage CSF neutrophils or lymphocyte counts is often recorded in the total number box rather than the percentage box**
 - Please make sure you know if you are recording a percentage or a total number – if you are unsure then check with your PI or local laboratory.
- **The final diagnostic category is often wrong**
 - Please refer to the protocol for definition of controls or aseptic meningitis. Please also refer to the more detailed flowchart I sent round recently – let me know if you would like another copy, or never received one in the first place.
- **There are often Unknowns written in for the results of tests**
 - Generally tests are either done or not done. Please make sure you check the laboratory results systems as well as looking in the notes for evidence of whether a test has been done or not. Again if not sure ask. Remember also that it may take several weeks/months for some tests to be completed and results to be returned so if you are filling in CRFs soon after admission remember to go back and check things like cultures, PCR results and especially TB cultures which can take up to 8 weeks to be reported as negative.

I hope this is some helpful pointers.



Study Update

Aetiology



	Not Meningitis (n=282)	Suspected Viral Meningitis (n=136)	Proven Viral Meningitis (n=145)	Suspected Bacterial meningitis (n=21)	Proven Bacterial Meningitis (n=55)
Median Age	34	33	30	34	59
%age female	63.5	59.6	68.3	57.1	47.3

Proven = CSF pleocytosis and a pathogen identified

Suspected = Based on CSF pleocytosis, differential and glucose ratio/CSF glucose where done and NO PATHOGEN FOUND.

Probable = Pathogen identified outwith the CSF

Other Meningitis – cause identified either non-infectious or extrameningeal

Dates for your diary

NeuroID2014

A chance to find out about the latest developments in brain infections research and a clinical update for clinicians of all grades who want to update their knowledge and skills. Registration now open.



**Neuro
ID 2014**

Liverpool Neurological Infectious Diseases Course
21-23 May 2014
www.liv.ac.uk/neuroidcourse



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British Infection Association Trainees meeting and Spring Meeting 12th
and 13th June 2014

<http://www.britishinfection.org/drupal/>

Important Contacts:

Fiona McGill, Research Fellow: 0151 795 9606

Chloe Smith, Data Manager: 0151 795 9649

Richard Crew, IT systems developer (and all things Open Clinica™ related!): 0151 795 9611

Meningitis research Foundation (for help and support for patients and medical staff):

www.meningitis.org

**Thank you again and
Merry Christmas from all
at Brain Infections UK.**