

ADD PROJECT TO THE KIRBY INSTITUTE WEBSITE

Section1 – In the top box

Title: Defining risk and mechanisms of permucosal transmission for acute HCV infection within high-risk populations (RAMPT-C)

Tags:

Date Commenced (MonthYYYY): June 2009

Date Completed (MonthYYYY): June 2012

Project Funding: NHMRC and St Vincent's Clinic Foundation

Currently Recruiting (Yes/No): Yes

Photo: logo or other photo (place in the P:\NCHECR\Website\Projects\Images folder)

Section2 – About the project

Rational:

Hepatitis C is usually transmitted by blood to blood contact. The risk of transmission by sexual contact has been thought to be low. However, in recent years increasing hepatitis C infection has been documented among HIV-positive gay men, with sexual contact the most likely means of infection in the majority of cases. This study will use established cohorts to define levels of hepatitis C risk through sexual contact among homosexual men to inform public health strategies.

Aims:

The aim of the study is to characterise permucosal transmission of HCV among HIV-positive and HIV-negative MSM, through clinical and molecular epidemiological analysis, with qualitative socio-behavioural and biological studies.

Design & Method:

The study explores the epidemiology and transmission mechanisms of HCV using three distinct substudies: Part I - Molecular phylogenetic analysis on prospective and retrospective MSM samples. This will explore the relationship between the HCV mono-infected and HIV co-infected individuals. In particular, clustering of cases based on HIV sero-status and transmission risk factors will be made.

Part II - The HCV virological analysis of semen and STI screening. Paired serum and semen samples will be collected in the prospectively identified acute HCV infected MSM and compared with chronic HCV infected MSM, recruited from the established longitudinal study cohorts of pH, ATAHc and HIM.

Part III - A detailed behavioural and qualitative assessment of sexual and drug risk behaviour and attitudes following diagnosis of acute HCV in HIV co-infected MSM. Interviews will be conducted at Baseline and 24 weeks.

Progress:

All HCV cases from ATAHc (n=160) and prevalent and incident HCV cases from the HIM (n=22) and pH (n=23) cohorts with detectable HCV RNA, will undergo sequencing (n=205). Furthermore, based on ATAHc recruitment a further 45 acute HCV cases among MSM are estimated to be enrolled through the hospital clinics. Thus in total approximately 250 samples will be sequenced. There are currently 28 prospective patients enrolled.

Benefits:

HCV has emerged as an increasingly significant problem in HIV-positive individuals. HCV/HIV co-infection is associated with accelerated hepatic fibrosis, resulting in increased hepatic-related morbidity and mortality along with significant costs to our community. Public health strategies for HCV prevention need to be based on a sound knowledge of the current patterns of HCV transmission, including permucosal (sexual) transmission. While the behavioural, biological and sexual practice issues are likely to be complex, understanding of the risk behaviours would allow public health interventions to be appropriately focused. Currently, limited data exists in relation to risk practices associated with HCV acquisition among MSM to drive campaigns.

Output:

Section 3 – Contributors

Program/s:

Viral Hepatitis Clinical Research Program

Project members:

Dr Gail Matthews: The Kirby Institute

Ms Pip Marks: The Kirby Institute

Ms Tanya Applegate: The Kirby Institute

Ms Sofia Bartlett: The Kirby Institute

Mr Francois Lamoury: The Kirby Institute

Ms Amanda Erratt: The Kirby Institute

A/Professor Garrett Prestage: The Kirby Institute

Other investigators:

Dr Mark Danta

A/Professor Margaret Hellard

Dr Joseph Sasadeusz

Collaborating centres:

St Vincent's Hospital, Sydney

The Alfred Hospital, Melbourne

Section 4 – Publications related to this project

No need to fill out as this will automatically populate from the filtered publication database for that project.

RIGHT SIDE MENU OPTION

Section 1 – Menu

No input needed.

Section 2 – Project contacts

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