FibroScan Sub-Study – Novel Approaches to Studying Liver Fibrosis –Transient Elastography

In 2012, the CCC developed a protocol for a FibroScan sub-study. The primary objective of this sub-study was to use the FibroScan test as a method of determining liver fibrosis progression in chronic HIV and HCV co-infection.

The FibroScan is used for evaluating changes in the liver in a completely non-invasive and painless manner, with no risk for the participants. The examination procedure consists of participants lying down on their back with their bodies in a C-shape position. The probe is placed in the intercostal space on the right lobe of the liver. High-frequency sound waves are generated and measured as they pass through the liver. The measurement is represented in pressure (kPa) and CAP (Controlled Attenuation Parameter – dB/m). The only requirement for an accurate reading is for participants to be fasting for 3 hours or more prior to the FibroScan. Trained operators are able to perform the FibroScan; however, the values obtained must be interpreted by a physician experienced in dealing with liver disease.

The FibroScan sub-study was implemented in the following study recruitment sites:

1. **Site A:** Oak Tree Clinic, Vancouver, BC
2. **Site B:** Vancouver Infectious Diseases Research and Care Centre Society, Vancouver, BC
3. **Site C & K:** MUHC Chronic Viral Illness Service Clinic, Montreal, QC
4. **Site E:** BC Centre for Excellence in HIV/AIDS, Vancouver, BC
5. **Site F:** Regina Qu'Appelle Health Region, Regina, SK
6. **Site M:** Hamilton Health Sciences – McMaster University Medical Centre Health Science, Hamilton, ON
7. **Site Q:** Centre Hospitalier de l'Université de Laval, Québec City, QC
8. **Site T:** Toronto General Hospital – Infectious Disease Division, Toronto, ON

This sub-study has now been integrated into the CCC study, and participants from the aforementioned sites get a FibroScan every 6 months during their routine follow-up visits. We are one of the few cohorts that collect longitudinal FibroScan data. This has allowed us to demonstrate that FibroScans are the preferred method for assessing changes in liver fibrosis over time, especially after being cured by HCV treatment. The article can be found here: https://pubmed.ncbi.nlm.nih.gov/32504083/

We continue to collect FibroScan data to determine if we can understand the factors that will lead to improved fibrosis over time among those cured of HCV.

HCV Treatment Barriers among Indigenous Peoples Sub-Study – Recognizing and Responding to Barriers to HCV Treatment Among Indigenous People Who Use Drugs in Canadian Cities

Between October 2015 and June 2018, Dr. Margo Pearce met with Indigenous people living with HCV to understand what can be done to better support and facilitate Indigenous people's access to treatment. Canadian data shows that Indigenous people are disproportionately affected by HCV, with an incidence rate of 4.7 times higher compared to non-Indigenous people1. The aim was to inform the development of decolonizing HCV programming by putting forward pragmatic recommendations based on the lived experiences of Indigenous people living with or treated for HCV and the perspectives of HCV treatment providers. Dr. Pearce interviewed 45 HCV-affected participants from the Cedar Project and CCC and 10 HCV treatment providers for this study. The interviews took place in Vancouver, Prince George, Sudbury, and Regina.

Three overarching and interdependent themes emerged from the collected data:

1. **Understand colonization as a social determinant of health and wellness among Indigenous people living with HCV**

   Understanding that the health disparities affecting Indigenous communities stem from colonization and the ongoing effects of residential schools and foster care systems. Colonization has fueled systemic racism, stigma, and discrimination towards Indigenous communities and has caused unremitting stress amongst Indigenous peoples.

2. **Treat us with respect: create and maintain trust within the doctor-patient relationship**

   Patient-provider relationships were perceived as respectful, disrespectful, and a mix of both. Respectful relationships with providers were comprised of authenticity and consistency with regards to respect, acceptance of substance use, support of overall well-being, and right to self-determination (e.g., involving Indigenous patients in each stage of their HCV treatment and advocating for Indigenous patients in instances of stigma and discrimination coming from other healthcare providers). Disrespectful relationships with providers consisted of a lack of understanding about colonization and systemic violence as determinants of health, and unsafe attitudes and actions (e.g., purposely withholding treatment and paternalistic judgments).

3. **Identify, build, and strengthen circles of care**

    Weaving Indigenous healing and culture into the foundations of HCV clinical care by offering helpful individuals and resources (e.g., Elders and Indigenous navigators) to help HCV-affected Indigenous people navigate health challenges and systemic barriers to healthcare, including HCV treatment and cure.

Analyses of these interviews were presented during the Canadian Association for HIV Research (CAHR) in 2018 and 2019 by Dr. Pearce and Kate Jongbloed. The manuscript has been published in the International Journal of Drug Policy. The article can be found here: https://pubmed.ncbi.nlm.nih.gov/31525640/

A word from Dr. Pearce – *"I would like to thank all the study coordinators and staff at each study site for the support in this work"*.