

Catch Up on the CATCH Cohort's Successes

By Vivian Bykerk, MD, FRCPC; and Janet Pope, MD, MPH, FRCPC

The Canadian Early Arthritis Cohort (CATCH) Study is a national initiative that was established in 2007 by investigators with the aim of improving the lives of patients with new-onset rheumatoid arthritis (RA). This is a prospective longitudinal observational cohort study of participants with incident RA who are followed for outcomes of disease activity, symptoms, and other patient-valued measures. Data are captured systematically at specific expected clinical encounters each year (every three months for the first year, every six months in the second year and then annually). The CATCH investigator group, which rapidly grew to up to 22 investigative sites, has in the last 12 years recruited over 3,500 people, and captured data on over 10,000 patient years of follow-up. More than 400 patients have bio banked samples, scored serial radiographs, and 1,000 patients have more than five years of follow-up. The investigators have published more than 40 manuscripts and presented more than 200 abstracts at Canadian and international meetings. In order to share the knowledge gleaned from this study we developed a website for patients and providers (www.earlyarthritis.ca) to learn more about our work.

CATCH rheumatologists aim to meet treatment targets and to increase the number of patients who achieve sustained remission (or, if not possible, low disease activity) by one year (and earlier). Since the Canadian Rheumatology Association (CRA) recommendations in RA were disseminated, we have seen an increase in those who achieve this. Now 60% achieve this target. This, in part, can be attributed to optimized use of medication, and adherence to recommendations. More patients are now using subcutaneous methotrexate or triple therapy as their first therapeutic strategy, which appears to be leading to improved outcomes compared to seven years ago.

CATCH investigators are also focusing their efforts to ensure that more patients have timely access to care. Given the referral process in most provinces it is unusual for patients to be seen before three months of persistent symptoms and the mean persistent symptom duration at study entry is still 5.8 months. Collaborations with external researchers to enhance models of care will include targeting earlier access to care.

Recently the electronic data capture platform has been upgraded allowing easier means to survey patients via mobile devices and to more readily enter clinician-based measures. This has allowed us to integrate the patient voice, capturing RA-related symptoms, mood, adherence, and other quality of life measures at the time of their clinical encounters. For instance, the CATCH patients contributed to validating the flare questionnaire which is now published.

We now have extensive clinical phenotypic data that allows us to examine the patient perspective, perform qualitative studies, and real-world drug evaluation. Investigators have partnered with external research groups including CAN-AIM, a subsidiary of the drug safety and evaluation network (DSEN) of Health Canada (see article in this issue on page 19), the Arthritis Alliance of Canada and the CRA to study the comparative effectiveness and safety and use of medication and models of care. We hope to continue to build partnerships and bridges with other stakeholders to study administrative data and health economics, enabling us to better understand patterns of health and health care in our patients, particularly given the high number of comorbidities in this population. Our goal over time is also to integrate translational studies using collected biological specimens that will allow sequencing studies to look at genetic associations and immunophenotyping.

In the coming year, this valuable national research platform will be the cornerstone of an important Canadian Institutes of Health Research (CIHR)-funded pragmatic trial of treatment tapering guided by both patients and clinicians, with the aim of reducing therapy without causing excessive RA flare. We are also participating in a national initiative to examine the use of biosimilars, and an initiative to study models of care as already mentioned.

In summary, the CATCH study could not be possible without the 3,500 (and growing) patient participants, over 100 rheumatology team members, clinicians, researchers and scientists. This study has been a successful national initiative, funded by multiple stakeholders including pharmaceutical companies and grants, that has grown over 12 years. We anticipate much more can be learned from studying early RA in Canada using the CATCH platform.

Continued on page 28

Medical Cannabis: The New Miracle or a Placebo Pandemic? (Continued from page 27)

missions to emergency rooms for those experiencing adverse effects, especially children, are often tucked away and given less prominence.⁵⁻⁸ Patients search for a magic potion, and perhaps the medical community has been amiss in failing to recognize the potential benefits of cannabis. Perhaps the effect is not so much on the underlying medical condition, but rather a surreptitious psychoactive effect that gives a sense of relaxation and calm; perhaps not such a poor payoff for many.

Who gives advice about medical cannabis?

The internet and media are awash with advice, favourable reports and details about medical cannabis. Dispensary staff, with less than 20% reporting any medical training, are freely advising patients in the U.S.⁹ In Canada, agents for the producers provide similar advice, but without documentation of the training of these persons. Advice regarding the ideal molecular content, dosing schedules and adjustments for a particular condition to a specific patient represents the ideal of patient-tailored treatment. This notion has echoes of the old-fashioned apothecary, mixing a little of this and that to obtain the perfect mix. This sense of highly personalized medicine is promoted by the salespersons of producers as well as “cannabis-savvy” doctors. It is puzzling to understand how physicians in this day project themselves as experts in the administration of a single substance. Is the ideal of medical care not to address the whole person? Could it be that today’s “cannabis clinics” are not dissimilar from the medical “opioid mills” in North America that have been a cause of extreme suffering?

The reality

There is no turning back as cannabis is a legal medical and recreational substance in Canada, with easy access for those who hold hope for medical relief. Who are the winners in this game? The industry is clearly thriving; Canadian politicians are lauded as forward thinking; Canada is proud to be a leader in this field; cannabis news sells well, but what about our patients? Perhaps some patients will truly find a magic treatment, but clearly the financial inter-

ests of stakeholders will be substantial. As physicians who practice evidence-based medicine, is it not aberrant that we swivel 180-degrees, and simply embrace anecdotes and popular beliefs, throwing aside rational judgement?

Cannabis, now embedded into clinical care, may be a truly neglected panacea for many ills; or perhaps physicians are on the brink of an epidemic of pseudoscience that is promoted by a handful of “cannabis-savvy” doctors who base their competence on “clinical experience,” poor science and vigorous promotion to a vulnerable patient population. How this epic will play out in time remains to be seen. Will cannabis emerge as a truly neglected but welcome addition to the physicians’ armamentarium, will the current enthusiasm just blow over, or are we opening a frightening Pandora’s Box? I, however, pity those with limited income who are enticed to spend precious dollars on a possible modern-day snake oil. Are we in the calm before the storm erupts?

The views expressed in this article are those of the author, supported by scientific references and vast clinical experience. They should not be taken to represent an official position of the CRA, CRAJ or STA Communications.

References:

1. Jikomes N, Zoorob M. The cannabinoid content of legal cannabis in Washington State varies systematically across testing facilities and popular consumer products. *Sci Rep* 2018; 8:4519.
2. Hazekamp A. The trouble with cbd oil. *Medical cannabis and cannabinoids* 2018; 1:65-72.
3. Vandrey R, Raber JC, Raber ME, et al. Cannabinoid dose and label accuracy in edible medical cannabis products. *JAMA* 2015; 313:2491-3.
4. Bonn-Miller MO, Loflin MJE, Thomas BF, et al. Labeling accuracy of cannabidiol extracts sold online. *JAMA* 2017;318:1708-9.
5. Vo KT, Horng H, Li K, et al. Cannabis intoxication case series: The dangers of edibles containing tetrahydrocannabinol. *Ann Emerg Med* 2018; 71:306-13.
6. Thomas AA, Mazar S. Unintentional marijuana exposure presenting as altered mental status in the pediatric emergency department: A case series. *J Emerg Med* 2017; 53:e119-e23.
7. Wang GS, Le Lait MC, Deakyn SJ, et al. Unintentional pediatric exposures to marijuana in Colorado, 2009-2015. *JAMA Pediatrics* 2016; 170:e160971.
8. Rao DP, Abramovici H, Crain J, et al. The lows of getting high: Sentinel surveillance of injuries associated with cannabis and other substance use. *Can J Public Health* 2018; 109:155-63.
9. Haug N KD, Sottile J, Babson K, et al. Training and practices of cannabis dispensary staff. *Cannabis and cannabinoid research* 2016; 1:244-51.

*Mary-Ann Fitzcharles, MD, FRCPC
Associate Professor of Medicine,
McGill University Health Centre
Montreal, Quebec*

Catch Up on the CATCH Cohort’s Successes (Continued from page 20)

*Vivian Bykerk, MD, FRCPC
Associate Professor of Medicine,
Weill Cornell Medical College,
Cornell University
Director of the Inflammatory Arthritis Center,
Division of Rheumatology
Hospital for Special Surgery
New York, NY, USA*

*Janet Pope, MD, MPH, FRCPC
Professor of Medicine,
Division Head,
Division of Rheumatology,
Department of Medicine,
St. Joseph’s Health Care,
Western University
London, Ontario*