

## 19 - Consensus Recommendations on Dosing and Administration of Medical Cannabis to Treat Chronic Pain: Results of a Modified Delphi Process

Arun Bhaskar<sup>1</sup>, Alan Bell<sup>2</sup>, Michael Boivin<sup>3</sup>, Wellington Briques<sup>4</sup>, Matthew Brown<sup>5,6</sup>, Hance Clarke<sup>7</sup>, Claude Cyr<sup>8</sup>, Elon Eisenberg<sup>9</sup>, Ricardo Ferreira de Oliveira Silva<sup>10</sup>, Eva Frohlich<sup>11</sup>, Peter Georgius<sup>12</sup>, Malcolm Hogg<sup>13</sup>, Tina Ingrid Horsted<sup>14</sup>, Caroline A. MacCallum<sup>15</sup>, Kirsten R. Müller-Vahl<sup>16</sup>, Colleen O'Connell<sup>17</sup>, Robert Sealey<sup>18</sup>, Marc Seibolt<sup>19</sup>, Aaron Sihota<sup>20</sup>, Brennan K. Smith<sup>21</sup>, Dustin Sulak<sup>22</sup>, Antonio Vigano<sup>23</sup>, Dwight E. Moulin<sup>24</sup>

<sup>1</sup>Pain Management Centre, Imperial College Healthcare NHS Trust, London, United Kingdom.

<sup>2</sup>Department of Family and Community Medicine, University of Toronto, Toronto, Ontario, Canada.

<sup>3</sup>CommPharm Consulting, Barrie, Ontario, Canada. <sup>4</sup>Canopy Growth Corp, São Paulo, Brazil.

<sup>5</sup>Department of Pain Medicine, The Royal Marsden Hospital, London, United Kingdom. <sup>6</sup>The Institute of Cancer Research, London, United Kingdom. <sup>7</sup>Department of Anesthesia and Pain Medicine, Toronto General Hospital, University Health Network, University of Toronto, Toronto, Ontario, Canada.

<sup>8</sup>Department of Family Medicine, McGill University, Montreal, Quebec, Canada. <sup>9</sup>Institute of Pain Medicine, Rambam Health Care Campus, The Technion, Israel Institute of Technology, Haifa, Israel. <sup>10</sup>Director at Vertebralis Spine Center, Rio de Janeiro, Brazil.

<sup>11</sup>Department of Anaesthesiology and Pain Management, Helen Joseph Hospital, Johannesburg, South Africa. <sup>12</sup>Pain Rehab, Suite 4 Noosa Central, 6 Bottlebrush Avenue, Noosa Heads, QLD 4567, Australia. <sup>13</sup>Department of Anaesthesia and Pain Management, Royal Melbourne Hospital, Melbourne, Australia. <sup>14</sup>Rheumatology, Danish Hospital for Rheumatic Diseases, Gråsten, Denmark. <sup>15</sup>Faculty of Medicine, University of British Columbia, Vancouver, British Columbia, Canada. <sup>16</sup>Hannover Medical School, Department of Psychiatry, Social Psychiatry and Psychotherapy, Hannover, Germany. <sup>17</sup>Department of Physical Medicine and Rehabilitation, Stan Cassidy Centre for Rehabilitation, Fredericton, New Brunswick, Canada. <sup>18</sup>Cannabinoid Medicine Specialist, Victoria, British Columbia, Canada. <sup>19</sup>Algesiologikum - Centers for Pain Medicine, Day Clinic for Pain Medicine, Munich, Germany. <sup>20</sup>The University of British Columbia, Faculty of Pharmaceutical Sciences, Vancouver, British Columbia, Canada. <sup>21</sup>CTC Communications, Medical Division, Mississauga, Ontario, Canada. <sup>22</sup>Integr8 Health, Falmouth, Maine, USA. <sup>23</sup>Department of Oncology, McGill University, Montreal, Ontario, Canada. <sup>24</sup>Departments of Clinical Neurological Sciences and Oncology, Earl Russell Chair in Pain Medicine, Western University, London, Ontario, Canada

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### Purpose

Chronic pain affects close to two billion people worldwide and is associated with impairment in physical and emotional function, reduced participation in social and vocational activities, and lower perceived quality of life.

Medical cannabis has been used to treat chronic pain for centuries. Patient-reported data across numerous geographies indicates that chronic pain management is one of the most common reasons for medical cannabis use. In patients with chronic pain, medical cannabis treatment has been associated with an improvement in pain-related outcomes, increased quality of life, improved function, and a reduced requirement for opioid analgesia.

The number of countries in which medical cannabis use is approved has increased in recent years. Additionally, the World Health Organization has moved to consider a rescheduling of cannabis under the international drug control framework to a less stringent schedule.

Despite the storied history and increased global use of medical cannabis, systematic reviews and meta-analyses examining cannabinoids for treatment of chronic pain have reported low to moderate levels of evidence to support the use of cannabinoids for chronic pain. As a result of this evidence gap, there are limited scientific data to guide dosing and administration of medical cannabis in clinical practice.

To bridge the gap between a lack of evidence and increased use of medical cannabis, we have conducted a modified Delphi process with 20 medical cannabis leaders across nine countries to develop consensus-based recommendations for the safe and effective use of medical cannabis to treat chronic pain.

### **Methods**

We conducted a multi-stage modified Delphi process. An initial clinical practice survey was sent out to a 20-member global task force to gain an understanding of how patients are being treated with medical cannabis across different countries. A draft of consensus questions was developed and reviewed twice by the 9-member scientific committee before being sent out to all task force members for two rounds of pre-voting. A threshold of  $\geq 75\%$  agreement was predetermined for declaring consensus. Following the pre-voting rounds, two virtual meetings were held to vote on the remaining key questions.

### **Results**

There was consensus that medical cannabis may be considered for patients experiencing neuropathic, inflammatory, nociplastic, and mixed pain. Three treatment protocols were developed and categorized as: Routine, Conservative, and Rapid. The clinician and patient may choose to move between the protocols as necessary. Oral administration with oil or capsules was found to be the recommended administration format. If breakthrough pain management is necessary, dried flower vaporization was found to be the recommended mode of administration.

The routine stream is designed for the majority of patients with chronic pain. The recommendations included: Initiate on CBD-predominant variety at a dose of 5 mg CBD twice daily. Titrate the CBD-predominant dose by 10 mg every 2 to 3 days until the patient reaches their goals, or up to 40 mg/day. At a CBD-predominant dose of 40 mg/day clinicians may consider adding THC at 2.5 mg and titrate by 2.5 mg every 2 to 7 days until a maximum daily dose of 40 mg/day of THC. When up-titrating either cannabinoid, the total daily dose can be divided in 2-4 administrations.

The conservative protocol is recommended for patients who may be more sensitive to medical cannabis effects and who would prefer to prioritize safety. Clinically frail patients, the elderly, those with complex comorbidities, polypharmacy, and/or mental health disorders, may also be appropriate for the conservative approach. The recommendations included: Initiate on CBD-predominant variety at a dose of 5 mg once daily. Titrate the CBD-predominant dose by 10 mg every 2 to 3 days until the patient reaches their goals, or up to 40 mg/day. At a CBD-predominant dose of 40 mg/day clinicians may consider adding THC at 1 mg/day and titrate by 1 mg every 7 days until a maximum daily dose of 40 mg/day of THC.

The rapid stream was designed for individuals who require more rapid titration or earlier initiation of THC such as patients with severe pain or functional impairment, or cannabis experienced patients. The recommendations included: Initiate on a balanced THC:CBD variety at 2.5-5 mg of each cannabinoid once or twice daily. Titrate by 2.5-5 mg of each cannabinoid every 2 to 3 days until the patient reaches his/her goals or to a maximum THC dose of 40 mg/day.

### **Conclusions**

Our modified Delphi process led by experts in the field of medical cannabis/cannabinoid medicine resulted in the development of three protocols for the dosing and administration of medical cannabis to treat chronic pain. These results are intended to provide clinicians with safe and effective medical

cannabis prescribing protocols and may be of great utility should medical cannabis be included in a patient's treatment regimen. It is important to note that every patient is different and medical cannabis treatment, like most other therapies, should be individualized to the patient. Shared treatment decision-making with the patient is important and establishing treatment goals during the initial medical consultation may enhance patient outcomes and adherence to medical cannabis treatment. Future randomized control trials examining the safety and efficacy of medical cannabis compared against current standards of care will be required to elucidate if the developed protocols result in improved patient outcomes. The recommendations provided will be updated as new clinical trial evidence becomes available to inform on the type of dosing and mode of administration of medical cannabis for the treatment of chronic pain.

