A botanical formulation for managing opioid withdrawal: Design of a healthy subject study

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Introduction

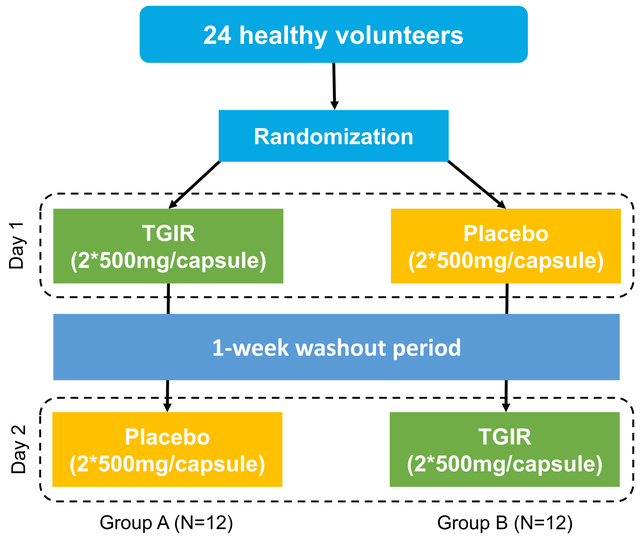
- Opioid withdrawal is a major barrier to voluntary opioid discontinuation and retention in opioid agonist treatment (OAT)[1,2].
- There is a clear need for medications that improve the clinical management of opioid withdrawal as a crucial bridge to higher retention rates and better access to treatment.
- Heantos-4 (H-4) is a Vietnamese botanical formulation containing compounds with analgesic and sedative properties[3,4].
- A series of safety and efficacy studies have demonstrated high success rates of H-4 transitioning over 10,000 individuals with opioid dependence through withdrawal with no reported significant adverse events[3].
- In October 2019, Health Canada approved the importation and sale of the H-4 formulation under the acronym TGIR (Traditional Gastrointestinal Remedy) as a natural health product.

Objectives

- To confirm the safety and explore any analgesic properties of TGIR in healthy subjects.
- To provide a more complete physiological-effects profile of TGIR and the basis for further clinical studies.

Methods

- A randomized, placebo-controlled, crossover trial with 24 healthy volunteers at Vancouver General Hospital
- Participants receive each of the two treatments, TGIR followed by placebo or vice-versa, with a one-week period between treatments and 4-hour observation period each day.



The botanical formulation of TGIR shows promise as a non-opioid approach to managing opioid withdrawal syndrome.

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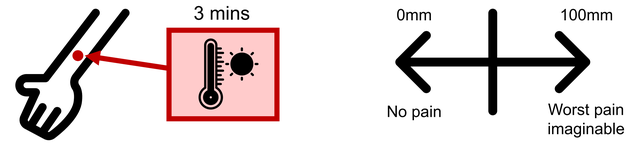
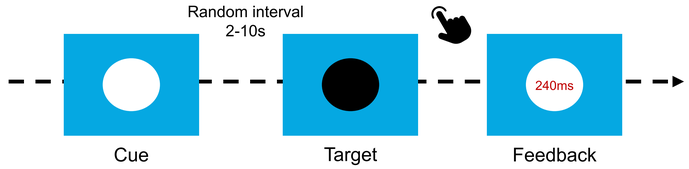
Assessments

1. Physiological monitoring of heart rate and blood pressure
2. Standardized pain sensitivity testing with Brief Thermal Sensitization (BTS): A quantitative sensory testing apparatus warms skin surface to desired temperature between 32°C and 50°C. Participants rate painfulness of stimulation on Visual Analogue Scale for 3 minutes.



3. Measure of sedation with Psychomotor Vigilance Task (PVT): Lapses are defined as reaction times exceeding 500ms, or failure to react to small changes. PVT lapses are believed to represent perceptual, processing, or executive failures in the central nervous system (CNS) and have been utilized as an objective indicator of cognitive impairment.



Results

- The clinical trial is currently ongoing with no observations of adverse events or serious adverse events.
- Given the well-established safety record of H-4 in Vietnam at much higher doses (up to 14 capsules, 7.0g/day), patient observations, and perceived effects, no adverse events are anticipated during the remainder of the trial.
- Results from this study will provide a more complete physiological-effects profile of TGIR, including any changes to heart rate and/or blood pressure.
- Once the safety of this botanical formulation is confirmed, other clinical studies will assess the effectiveness of TGIR on managing pain and withdrawal symptoms in the Canadian context.

Discussion

- Given the impact of the widespread opioid crisis, there is an urgent imperative to improve withdrawal management strategies safe and conducive to retention in treatment.
- Should the claims regarding efficacy and safety of TGIR hold, it will become an attractive alternative to standard opioid agonist treatments.
- As a non-opioid solution, TGIR will have no inherent overdose risk and low toxicity even at extreme dosages, enabling community-based withdrawal management.
- Importantly, they have the potential to remove the fear of withdrawal as a major barrier to seeking treatment in the opioid using population.

References

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