OP-18
The utility of droperidol in the treatment of Cannabinoid Hyperemesis Syndrome

Carl Lee (1), Anselm Wong (1,2,3)
(1) Austin Clinical School, University of Melbourne, Victoria, Australia. (2) Austin Toxicology Unit and Victorian Poisons Information Centre, Austin Health, Victoria, Australia. (3) Department of Medicine, School of Clinical Sciences, Monash University, Victoria, Australia.

Objective: Cannabinoid hyperemesis syndrome (CHS) is characterized by recurrent paroxysmal episodes of cyclical nausea and intractable vomiting, abdominal pain, and compulsive hot showers/baths with symptom relief, on the background of chronic cannabis use. There have been multiple retrospective case studies/series looking at the use of pharmaceuticals including haloperidol, topical capsaicin, benzodiazepines, propranolol and tricyclic anti-depressants. To date there have been no case series reporting the use of droperidol in symptom management of CHS.

Methods: We performed a retrospective review of the medical records of Emergency Department presentations ranging from January 2006 to December 2016. We searched electronic (PowerChartÔ, CERNER, USA) records for keywords including “cannabis”, “cannabinoid”, “cannabis”, “hyperemesis”, “droperidol”. We performed a secondary search of pharmacy data. Each record was reviewed to determine if that patient met criteria for CHS. Data was analysed and separated into two groups: those who received droperidol and those who did not. The primary outcome was defined as the total length of hospital stay. Secondary outcomes measures included time until discharge following last drug administration and number of anti-emetics used before and after droperidol administration.

Results: From our search, 689 records were identified and 76 met criteria. Thirty-seven of these patients were treated with droperidol and 39 were not. Median length of stay for the droperidol group (404 minutes) compared to no droperidol group (726 minutes) was significantly lower ($p = 0.014$). The median length of time to discharge after final drug administration in the droperidol group was 137 minutes (IQR = 13, 137) vs the no droperidol group of 185.5 minutes [146.3, 497]. There was a statistically significant earlier time to discharge post final drug administration in the droperidol group ($p = 0.002$). The median number of antiemetics given in the no droperidol group was 3. The number of times that 0.625mg, 1.25mg, 2.5mg, 5mg of droperidol administered were, respectively, 25, 20, 17, 3. The most frequent dosage of droperidol used was 0.625mg. The median number of agents used after the last dose of 0.625mg, 1.25mg, 2.5mg, 5mg of droperidol were, respectively, 1, 0.5, 0, 1. The frequency of ondansetron (n=100) and metoclopramide use (n=27) in the no droperidol group was double that of the droperidol group.

Conclusion: Use of low dose droperidol appears safe and results in less use of antiemetics and length of stay with CHS. Droperidol should be considered for first line management of CHS in the emergency department.