

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active. EMBASE, and trial registry repositories, including Clinical Trials.gov, were searched. Published and unpublished prospective randomized controlled trials evaluating the use of colchicine were included. Exclusion criteria included non-human populations, populations less than 18 years of age, and non-randomized studies. The primary outcome for this systematic review and meta-analysis was improvement in cardiovascular mortality. Four reviewers independently extracted the predefined data in duplicate. The risk of bias was evaluated according to the Cochrane Handbook for Systematic Reviews of Intervention criteria and the Newcastle-Ottawa Scale. Metaanalysis was used to pool study results. A total of 878 citations were retrieved. Seven studies reported the primary outcome and were included in the meta-analysis. Search results shown in Figure 1. The pooled estimate demonstrated improvement in cardiovascular mortality following the administration of colchicine post-ACS that did not reach statistical significance (RR 0.53; 95% CI 0.16-1.77; p=0.30) (Figure 2). No increase in overall side effects were observed with Colchicine compared with Placebo (RR 1; 95% CI 0.88-1.14; P=0.97).

CONCLUSION: Cardiovascular mortality was not significantly reduced with Colchicine in patients post ACS. While Colchicine is a promising new therapeutic option with a favourable safety profile, more data is needed to better assess its efficacy.





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017 GREATER TORONTO AREA HEART MAP CHALLENGE: THE FIRST CROWD-SOURCED AUTOMATED EXTERNAL DEFIBRILLATOR REGISTRY IN CANADA

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BACKGROUND: Out of hospital cardiac arrest (OHCA) causes 45,000 deaths in Canada per year. Overall survival rate is approximately 10%. If an Automated External Defibrillator (AED) is used, survival rates increase to 40-50%; AEDs are infrequently used, in part because they cannot be found in an emergency and the locations are not known. There is no legal obligation to register AEDs in Ontario. A voluntary existing registry is not current and is incomplete. Public engagement and crowdsourcing is an alternative method to identify and register AEDs in public places.

METHODS AND RESULTS: The GTA Heart Map Challenge was advertised using social media, TV and radio interviews by contest organizers and a cardiac arrest survivor. A website was developed to promote the Challenge and enable participants to sign-up as individuals or teams. Participants downloaded the free Pulsepoint smartphone application and "registered" publicly accessible AEDs. Registration included a photograph and detailed text description. GPS data was automatically pulled from the smartphone by the Pulsepoint application. All registered AEDs were uploaded in real-time. The teams competed for a total \$10,000 in prizes. The contest was scheduled to run for the month of March but was suspended after 2 weeks due to the COVID-19 pandemic. All AED entries were reviewed for completeness, compared to the existing registry, and qualitatively summarized. Over a two week period, 302 participants registered for the GTA Heart Map Challenge; 71 as individuals and 231 on teams. 1,301 AEDs were registered in total (1048 in Toronto and 253 in Peel). 92 % of AED entries had complete information. 24% of all AEDs were registered by the top 5 teams. Of the AEDs registered during the GTA Heart Map Challenge, 2% were previously documented in the existing registry and 98% were novel additions.

CONCLUSION: The GTA Heart Map Challenge is the first crowd-sourced AED registry of its kind in Canada. The results suggest that this form of public engagement is an effective means of locating and registering publicly accessible AEDs.

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IMPACT OF A DECISION ALGORITHM ON CLINICAL OUTCOMES OF REFRACTORY CARDIAC ARREST PATIENTS UNDERGOING EXTRACORPOREAL CARDIOPULMONARY RESUSCITATION (E-CPR)

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BACKGROUND: The use of extracorporeal circulatory life support (ECLS) improves survival in patients with refractory cardiac arrest