Prehospital Evidence Based Protocols Database Project

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Background - Emergency medical services (EMS) has been criticized for the lack of scientific evidence supporting prehospital treatment. Despite this (or because of this) criticism, research evaluating prehospital care is improving and evidence now exists to support some of the treatment and interventions provided in the prehospital environment. The Prehospital Evidence Based Protocols Database project is a repository of appraised evidence for prehospital practice.

Objectives – The primary objective of the project is to maintain a database of research evaluating prehospital interventions, which is organized according to typical paramedic protocols and is continuously updated.

Methods – A coordinator for the project, two senior editors and EMS physicians from across Canada (Section Editors), monitor the literature (Figure 1). Any study published in a peer reviewed journal of a prehospital intervention or medication is reviewed by a Section Editor and given a Level of Evidence (LOE) rating (Table 1). All articles and their LOE are then evaluated, and the intervention is assigned a Class of Recommendation (COR) rating (Table 2). As reviewed articles on a specific intervention in a protocol continue to be added to the database, the Class of Recommendation (COR) is updated.

Results – There are 19 Emergency Physicians serving as Section Editors who practice in 7 Canadian Provinces. There are 103 Prehospital Medical Protocols and 182 individual interventions, with some interventions appearing in multiple protocols. There are 1,987 articles cited in the database: 9.8% LOE I; 14.3% LOE II, 70.9% LOE III and 5.0% currently out for review (Table 3). There are: 3.5% COR A; 13.4% COR B; 68.9% COR C; 7.5% COR D; and 6.7% COR I. A single intervention may appear in multiple protocols, and is assigned a COR based on the context of the protocol (Table 4).

Conclusions – The Prehospital Evidence Based Protocol Database will be a valuable tool for EMS physicians to formulate protocols that are supported by high quality evidence from research, a source of evidence for paramedics and a reference for EMS researchers.

References