TITLE: Nitroglycerin for the Treatment of Pulmonary Edema Following Submersion: Clinical Effectiveness and Guidelines

DATE: 11 March 2014

RESEARCH QUESTIONS

1. What is the clinical effectiveness of nitroglycerin for the treatment of pulmonary edema secondary to submersion, in pre- or in-hospital settings?

2. What are the evidence-based guidelines regarding the use of nitroglycerin for the treatment of pulmonary edema secondary to submersion, in pre- or in-hospital settings?

KEY MESSAGE

No relevant health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, or evidence-based guidelines were identified regarding the use of nitroglycerin for the treatment of pulmonary edema secondary to submersion in pre- or in-hospital settings.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2014, Issue 3), University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. No methodological filters were applied to limit retrieval by study type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2009 and March 6, 2014. Internet links were provided, where available.

RESULTS

No relevant health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, or evidence-based guidelines were identified regarding the use of nitroglycerin for the treatment of pulmonary edema secondary to submersion, in pre- or in-hospital settings.

References of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

No relevant literature was found regarding the use of nitroglycerin for the treatment of pulmonary edema secondary to submersion, in pre- or in-hospital settings; therefore, no summary can be provided.

REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Randomized Controlled Trials
No literature identified.

Non-Randomized Studies
No literature identified.

Guidelines and Recommendations
No literature identified.

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APPENDIX – FURTHER INFORMATION:

Additional References

1. Gempp E, Louge P, Henckes A, Demaistre S, Heno P, Blatteau J-E. Reversible Myocardial Dysfunction and Clinical Outcome in Scuba Divers With Immersion Pulmonary Edema. The American Journal of Cardiology [Internet]. 2013 June [cited 2014 Mar 6]; 111(11): 1655–1659. Abstract available from: http://www.sciencedirect.com/science/article/pii/S0002914913005419

2. Best evidence topic reports. Bet 1. Managing acute pulmonary oedema: high or standard dose glyceryl trinitrate? Emerg Med J. 2009 May;26(5):357-8.

3. Gregorakos L, Markou N, Psalida V, Kanakaki M, Alexopoulou A, Sotiriou E, et al. Near-Drowning: Clinical Course of Lung Injury in Adults. Lung [Internet]. 2009 Apr [cited 2014 Mar 6]; 187(2):93-97. Abstract available from: http://link.springer.com/article/10.1007/s00408-008-9132-4