TITLE: Electric Shocks from Conducted Electric Weapons: Long-Term Clinical Effects and Guidelines for Medical Follow-up

DATE: 27 May 2014

RESEARCH QUESTIONS

1. What are the long-term clinical effects after receiving an electric shock from a conducted electrical weapon?

2. What are the guidelines associated with appropriate medical follow-up and discharge of people who have received an electric shock from a conducted electrical weapon?

KEY MESSAGE

One evidence-based guideline was identified regarding the medical follow-up and discharge of people who have received an electric shock from a conducted electrical weapon.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2014, Issue 4), 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 filters were applied to limit the retrieval by study type. The search was limited to English language documents published between Jan 1, 2009 and May 20, 2014. Internet links were provided, where available.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.
RESULTS

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by non-randomized studies and evidence-based guidelines. One evidence-based guideline was identified regarding the medical follow-up and discharge of people who have received an electric shock from a conducted electrical weapon. No health technology assessments, systematic reviews, meta-analyses, or non-randomized trials were identified regarding the long-term clinical effects after receiving an electric shock from a conducted electrical weapon.

Additional references of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

An evidence-based guideline produced by the American Academy of Emergency Medicine in 2010 states the following:

- “The current human literature has not found evidence of dangerous laboratory abnormalities, physiologic changes, or immediate or delayed cardiac ischemia or dysrhythmias after exposure to CEW electrical discharges of up to 15 seconds.”
- “Therefore the current medical literature does not support routine performance of laboratory studies, EKGs, or prolonged Emergency Department (ED) observation or hospitalization for ongoing cardiac monitoring after CEW exposure in an otherwise asymptomatic awake and alert patient.”1
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Non-Randomized Studies
No literature identified.

Guidelines and Recommendations


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APPENDIX – FURTHER INFORMATION:

Non-Randomized Studies – Volunteer Populations


Non-Randomized Studies – Surrogate Outcomes


Practice Guidelines and Recommendations – Unclear Methodology


Review Articles


Case Reviews


PubMed: PM22547671

Additional References

PubMed: PM21257680