




**MEETING ABSTRACTS****The Ethical Triage and Management Guidelines of the Entrapped and Mangled Extremity in Resource Scarce Environments: A Systematic Literature Review**

Eric S. Weinstein MD, MScDM<sup>1</sup> , James E. Gosney MD, MPH<sup>2</sup>, Teri Lynn Hebert MS, MLIS<sup>3</sup> , Brielle Weinstein MD<sup>4</sup>, Luca Ragazzoni MD, PhD<sup>1</sup> 

1. CRIMEDIM, Novara, Novara, Italy
2. ISPRM, Milan, Milan, Italy
3. MUSC, Charleston, SC, United States
4. USF, Tampa, Florida, United States

**Background/Introduction:** While there are accepted triage and treatment guidelines for the entrapped and mangled extremity in civilian and military resource rich environments, there are none for resource-scarce environments.

**Objectives:** A PRISMA systematic literature review was performed to elucidate the current triage and treatment of the entrapped and mangled extremity to understand the factors that contribute to the decision to amputate, or not amputate, and to extract data to develop clinical guidelines.

**Method/Description:** A lead researcher followed the PRISMA systematic literature review search strategy inclusion and exclusion criteria.

A first reviewer was randomly assigned sources. One of the two lead researchers was the second reviewer. Each determined the Level of Evidence (LOE) and Quality of Evidence (QE) from each source.

**Results/Outcomes:** Five-hundred ninety-seven (597) records were screened. Fifty-eight (58) articles were entered into the final study. There was one study determined to be LOE-1, 29 LOE-2, and 28 LOE-3 with 15 determined to achieve QE-1, 37 QE-2, and six QE-3.

Data extracted included relevant information to develop clinical guidelines to include physiologic parameters, injury patterns or procedures, imaging, rehabilitation, ethics, and the informed consent process.

**Conclusion:** This systematic literature review showed that there is a lack of studies producing strong evidence to support the triage and treatment of an entrapped or mangled extremity in resource-scarce environments. A Delphi method study is suggested to adapt and modify available evidence extracted to create clinical guidelines in the resource-scarce environment.

*Prehosp Disaster Med.* 2022;37(Suppl. 2):s69.

doi:[10.1017/S1049023X22001686](https://doi.org/10.1017/S1049023X22001686)