



EUROPEAN POLICYBRIEF

NO-FEAR



TITLE

New Methodologies and techniques to apply to medical emergency situations: damage control procedures

31/05/2023

INTRODUCTION

During its five year activity, NO-FEAR has studied different types of emergency and many tools and new medical devices that can be of First Responder interest. Damage Control Procedures were introduced in Trauma management for the first time by military medicine. For Damage Control procedures we intend:

1) damage control resuscitation (during transit) “aiming to limit blood loss and prevent coagulopathy by combining hypotensive resuscitation, early airway control and early and balanced use of blood products and other hemostatic agents”;

2) damage control surgery (in the Hospital) “rapid termination of an operation after control of life-threatening bleeding and contamination followed by correction of physiologic abnormalities and definitive management”.

Damage control procedures for major emergencies were less practiced at the beginning of the Project. During the Project, COVID appeared and was immediately taken as example of major emergency with some common and some unusual features relatively to important medical procedures.

EVIDENCE AND ANALYSIS

Damage control Surgery and Military Medicine: Coincidence of interest and techniques.

Several meetings were held between TFC, NEN and UCSC with the decision to adopt as a guideline the document ‘Overview of damage control surgery and resuscitation in patients sustaining severe injury’¹.

The document focused on damage control resuscitation from the incident location to the hospital Operating Room (OR), taking into account permissive hypotension, fluid needs, pelvic binding, use of POCUS (Point of Care Ultrasound) as a guide for invasive procedures (e.g., thoracic drainage), treatment communication during transport, damage control surgery (packing). These new procedures also derive from Military Medicine in particular for Trauma victims. Damage control resuscitation and damage control

¹<https://www.uptodate.com/contents/overview-of-damage-control-surgery-and-resuscitation-in-patients-sustaining-severe-injury>

surgery are the cutting edge of acute care of the patient in emergency settings of mass casualties and major emergencies.

STOP THE BLEED CAMPAIGN (which is the first maneuver of Damage Control) that is designed for Lay people by the American College of Surgeons has been introduced to Europe, but to become really effective must be translated into Member State Languages to be taught in lay settings.

POLICY IMPLICATIONS AND RECOMMENDATIONS

Operational implications and recommendations

One important policy is to increment the interaction with military medicine, due to the fact of the frequent coincidence of interests and objectives in trauma management. Often the procedures and the devices used in military medicine are used on civilians in situations of MCI after a time interval. One way to modernize civil first responders is to transfer precociously military technologies to the civilian settings. Military technologies on one hand are more costly, on the other may become of daily use and less expensive if they are bought in great quantities. With this strategy one could anticipate by some years the dissemination on a civilian level of these technologies. I.e. what has happened today with drones. Emergency Courses for Hospital responders for Emergency situations must be revised with introduction of some elements of military medicine. (i.e ATLS---TCCC). Training for lay people on basic Damage Control Procedures is mandatory and should be endorsed at EU Level. Stop the Bleed Course must be taught in Schools. Damage Control principles must be always applied. It is important first of all to extend this “philosophy” of patient management to all the FR and then to try to define some possible “standard” procedures that must be performed.

SUSTAINABILITY AND LEGACY

NO-FEAR partners, due to their experience, could bring an useful contribution if inserted or consulted or made part of Advisory Board of all Projects dealing somehow with response to major incidents. Take into account that if the incidents have victims, they end up with EMS and Hospitals.

RESEARCH PARAMETERS

Results presented in this policy brief are derived from multiple discussions with partners and interactions with military doctors. At the same time the observation of the major emergency situation created by pandemic in some Member States lead to a new way to evaluate the triage procedure in pandemics making it closer to that adopted during situations of conflict.

PROJECT IDENTITY

PROJECT NAME Network Of practitioners For Emergency medical systems and cRitical care (NO-FEAR)

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WEBSITE

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**FOR MORE
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