

Conclusion: Early-career and late-career firefighters have more self-injurious thoughts and behaviors and mid-career firefighters have the least.

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Thicker Posterior Subcutaneous Adipose Tissue (SAT) and Slighter Difference of SAT During the Peri-arrest Period are Associated with Favorable Neurological Outcomes at Hospital Discharge in Patients with In-Hospital Cardiac Arrest

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Introduction: Subcutaneous adipose tissue (SAT) and bony thorax will deform and conduct driving force during cardiac arrest (CA). The association between short-term prognosis and deformation of adult thorax for patients acquired return of spontaneous circulation (ROSC) following cardiopulmonary resuscitation (CPR) was unclear.

Method: Clinical records and CT images were collected from eligible patients admitted to the hospital who received CPR and achieved sustained ROSC from May 31st, 2019 to June 30, 2021. The patients were divided into different groups according to discharge outcome, then into three subgroups according to the ventilation mode before and after CPR. After that, patients with the same ventilation mode before and after CPR are combined and analyzed.

Results: Records from 1663 patients were reviewed. After selection, 70 patients were included into this study. Significantly thicker posterior SAT post-compression was found at the 7/8/10/11 spinous process plane in patients with favorable neurological outcome ($p < 0.05$). For patients receiving same kind of respiratory support before and after CPR, significantly thicker posterior SAT pre-compression at the 6/7/8/9/10/11 spinous plane and thicker posterior SAT post-compression at the 7/8/9/10/11/12 spinous plane ($p < 0.05$). For patients without mechanical ventilation before or after CPR, significantly thicker posterior SAT post-compression was found at the 10/11 spinous plane in patients with favorable neurological outcome ($p < 0.05$). For patients receiving mechanical ventilation before or after CPR, thicker posterior SAT post-compression was found at the 10/11/12 spinous plane was associated with favorable neurological outcome. No difference was found in the bony thorax within a different vertebral plane after subgroup analysis ($p > 0.05$).

Conclusion: Thicker posterior SAT and greater SAT depth difference after compression was associated with favorable neurological outcome at the discharge of patients who obtained ROSC after CA. A shorter duration of chest compression (< 6 minutes) doesn't cause calculable changes in patients' bony thorax in patients who obtained ROSC after CA.

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Updated Comprehensive Framework for Disaster Evaluation Typologies

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Introduction: The Comprehensive Framework for Disaster Evaluation Typologies (CFDET) was originally developed in 2017 with minor updates in 2018 (CFDET2.0). CFDET was created to unify and provide agreement on the identification, structure and relationships between multiple evaluation typologies found in the disaster setting. Since the publication of this framework, the world has witnessed unprecedented disaster-related events including two (2) Public Health Emergencies of International Concern (PHEIC): COVID-19 and Monkey Pox as well as the emergence and continuation of armed conflict in various countries around the world. This work presents CFDET3.0 which incorporates updates on international disaster frameworks, disaster health updates and evaluation guidelines.

Method: A scoping literature review on international disaster frameworks, disaster health updates and evaluation guidelines has been undertaken and included reviewing peer-reviewed and grey literature.

Results: The scoping literature review revealed updates on the following important publications:

World Health Organization (WHO) Health Emergency Disaster Risk Management (H-EDRM) (2019);

International Health Regulations;
 Universal Health Coverage (UHC);
 Climate Change Conference (COP27);
 Fragile and Conflict-affected Contexts (FCAC);
 Public Health Emergencies of International Concern, and
 Updated evaluation standards, guidelines, evidence-based reviews and knowledge management.

Conclusion: Incorporation of these international updates into CFDET2.0, strengthens global health and international disaster health responses with a focus on disaster health evaluation. The updated framework will be referred to as CFDET3.0. Future research is scheduled to develop a series of toolkits that will support an improved disaster evaluation process.

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Implementation of Hospital Disaster Preparedness and Response Plan in Nepal: A Mixed Study in 3 Public Hospitals of Nepal

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