

CLINICAL "SNIPPETS"

Advanced life support performance with manual and mechanical chest compressions in a randomized, multicentre manikin study.

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Overview: Clinical mechanical chest compression studies report diverging outcomes. Confounding effects of variability in hands-off fraction (HOF) and timing of necessary tasks during advanced life support (ALS) may contribute to this divergence. Study site variability in these factors coupled to randomization of cardiopulmonary resuscitation (CPR) method was studied during simulated cardiac arrest prior to a multicentre clinical trial.

Conclusions: HOF for manual vs. mechanical chest compressions varied between sites. Study protocol implementation should be simulation tested before launching multicentre trials, to optimize performance and improve reliability and scientific interpretation.