To compare the effects of central versus peripheral drug administration on the rate of return of organised electrical activity and/or spontaneous circulation during CPR” Nanayakkara and Smulder (2017).

Abstract:

OBJECTIVE: To compare the effects of central versus peripheral drug administration on the rate of return of organised electrical activity and/or spontaneous circulation during CPR.

STUDY DESIGN: Randomized clinical trial.

STUDY POPULATION: Hospitalized patients and patients presenting at the emergency department, older than 18 years, requiring CPR.

INTERVENTION: Central venous access Main study parameters/endpoints: Combined primary endpoint: rate of appearance of organised electrical activity or return of spontaneous circulation. Nature and extent of the burden and risks associated with participation, benefit and group relatedness: All patients are treated according to the guidelines of the European
Resuscitation Council, which are endorsed by the local VUMC CPR-committee. Central access will be obtained by cannulation of the external or internal jugular vein. To avoid interference with initial management, central venous access will be obtained after initiation of chest compressions, first attempt at defibrillation (if applicable), securing the airway and obtaining a peripheral access. All resuscitated patients require vascular access and almost all successfully resuscitated patients require central venous access. Obtaining central access during CPR may be associated with a slightly higher complication rate, such as arterial puncture and pneumothorax. Possible benefits for study subjects are a higher success rate of CPR.

Reference:

Thank you to our partners for supporting IVTEAM