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AutoPulse facilitated resuscitation in out-of hospital cardiac arrest as a bridge to coronary intervention

Marleen van Wely, Helmut Gehlmann, Etienne Cramer, Judith Bonnes,
Freek Verheugt, Harry Suryapranata, Menko-jan de Boer, Marc Brouwer

Radboud University Nijmegen Medical Centre, Nijmegen, The Netherlands

Background: Despite improvements in the chain of survival, outcome after an out-of-hospital cardiac arrest remains poor. In many cases the cause of the arrest is cardiac in origin, but due to suboptimal hemodynamic conditions coronary intervention is often difficult to perform. This is also caused by practical problems, given the need for continued chest compressions, while trying to perform a procedure. Mechanically assisted resuscitation by the AutoPulse might overcome the majority of these problems, given the blood pressures achieved, and the fact that manual compressions are not needed.

Methods: We describe 18 patients after an OHCA, who were resuscitated with use of the AutoPulse and transferred to the cathlab for a diagnostic angiography with/without subsequent coronary intervention.

Result!: Fourteen male, 4 female patients, with VF as primary rhythm in 7, all underwent coronary angiography, a percutaneous coronary intervention was performed in 7, with active Auto Pulse. Survival to discharge was 4 out of 18 (22%). In all survivors a percutaneous coronary intervention was performed.

Conclusion: These data show that percutaneous intervention with mechanical resuscitation with the AutoPulse is feasible, and warrant further research whether a more aggressive revascularization approach in the early phase after the out-of-hospital cardiac arrest could improve outcome.

Citation:

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