The initial values of cerebral oximetry constitute an independent variable associated with survival in CRP

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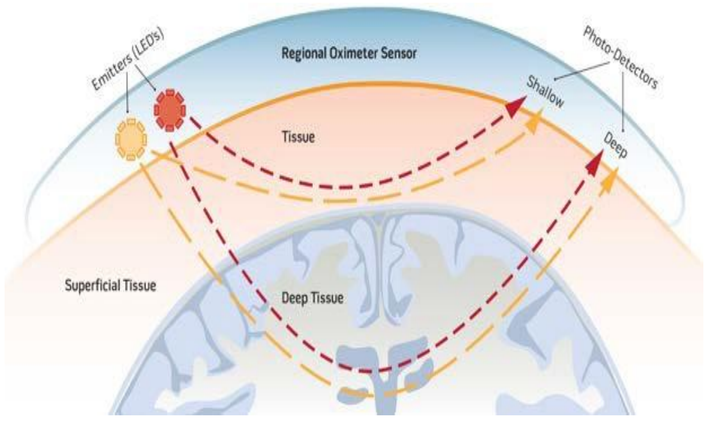

BACKGROUND

Cerebral oximetry (CO) can be an effective control of the effectiveness of resuscitation maneuvers in cardiac arrest (CA). This work aims to analyze if the values prior to the recovery of spontaneous circulation (ROSC), could predict both the recovery of the pulse and the neurological prognosis of these patients.

METHOD

Prospective observational cohort study.	
Population	Patients in medical CA, assisted by EMS (2016-2018).
CO values are recorded from the beginning of the CPR.	
Outcome variables	ROSC / CPC 30 days of admission.
Independent variables	Values of CO during CPR prior to ROSC
Statistics	Multivariate binary logistic regression (MBLR) adjusted to confusing variables. CI: 95%.

RESULTS

- N= 54 patients; 88,8% men
- Mean age 68.4 (SD.15.2).
- Mean value Initial OXI:
  - RIGHT: 42.21(SD-14.6)
  - LEFT: 42.8(SD-14.2)
- ROSC 46,3% CPC I-II 16,67%.
- Initial rhythm FV 45.3%.

		Hemisphere sensor %		p
Initial oximetry prior to ROSC	ROSC	LEFT	50,54	0,041
		RIGHT	50,20	0,018
	CPC degrees % (I – II)	LEFT	56,44	0,011
		RIGHT	57,56	0,031
Maximum oximetry prior to ROSC	CPC degrees % (I – II)	LEFT	56,17	0,016
		RIGHT	55,54	0,011

CONCLUSIONS

Initial values of cerebral oximetry are associated as an independent variable for both pulse recovery and neurological recovery.

Cerebral oximetry could be configured as a useful support tool in the treatment of prehospital CA.

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