

CLINICAL "SNIPPETS"

Comparison of a 10-breaths-per-minute versus a 2-breaths-per-minute strategy during cardiopulmonary resuscitation in a porcine model of cardiac arrest.

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BACKGROUND: Hyperventilation during cardiopulmonary resuscitation (CPR) is harmful.

Overview: The authors tested the hypotheses that, during CPR, 2 breaths/min would result in higher cerebral perfusion pressure and brain-tissue oxygen tension than 10 breaths/min, and an impedance threshold device (known to increase circulation) would further enhance cerebral perfusion and brain-tissue oxygen tension, especially with 2 breaths/min.

Conclusions: 2 breaths/min resulted in significantly lower carotid blood flow and brain-tissue oxygen tension than did 10 breaths/min. The addition of an impedance threshold device significantly enhanced carotid flow and brain-tissue oxygen tension, especially in the 10-breaths/min group.