

CLINICAL "SNIPPETS"

Positive end-expiratory pressure improves survival in a rodent model of cardiopulmonary resuscitation using high-dose epinephrine.

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Overview: Multiple interventions have been tested in models of cardiopulmonary resuscitation (CPR) to optimize drug use, chest compressions, and ventilation. None has studied the effects of positive end-expiratory pressure (PEEP) on outcome. We hypothesized that because PEEP can reverse pulmonary atelectasis, lower pulmonary vascular resistance, and potentially improve cardiac output, its use during CPR would increase survival.

Conclusions: In asphyxial cardiac arrest in a small rodent model, continuous application of PEEP (5 cm H₂O) during and after CPR had beneficial effects on survival that were independent of oxygenation and without adverse cardiovascular effects.