Prehospital Noninvasive Positive-Pressure Ventilation Saves Lives

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Pooled data from seven trials demonstrate major benefits.

Several prior studies have suggested benefit from prehospital noninvasive positive pressure ventilation (NIPPV) for respiratory distress. To determine whether there was benefit across all of the prior studies, researchers pooled data from seven randomized trials in which NIPPV was compared with standard therapy.

The trials included 632 patients with respiratory distress and suspected cardiogenic pulmonary edema, pneumonia, or exacerbation of chronic obstructive pulmonary disease or asthma. The definition of standard therapy varied among trials. Compared with patients receiving standard therapy, those receiving NIPPV were less likely to die in the hospital (risk ratio, 0.58) or to require invasive airway ventilation (RR, 0.37).

Comment: Prehospital NIPPV is clearly beneficial for treating patients with respiratory distress thought to be due to pulmonary edema, pneumonia, or reactive airways.

Citation(s):


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