Prehospital Boussignac Continuous Positive Airway Pressure: One year experience

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Introduction: Continuous positive airway pressure (CPAP) treatment for acute cardiogenic pulmonary edema (ACPE) has important benefits in gas exchange with reduction of endotracheal intubation (ETI) and related morbidity / mortality. The Boussignac CPAP (BCPAP) system is a small disposable lightweight plastic cylinder that is directly connected to a face mask. It has been shown to be effective and feasible in prehospital care.

Methods: A prospective study of one year was conducted in order to examine the clinical incomes of prehospital BCPAP. 48 patients with ACPE assisted by our emergency medical team were analysed on demographic and clinical features, tolerance and response to BCPAP, as well as for the need for ETI.



Conclusions:

- ACPE patients show significant improvement in oxygenation, subjective dyspnea, respiratory and heart rates with BCPAP system, producing a rapid physiological and symptomatic improvement.

- The use of Boussignac continuous positive airway pressure in prehospital care for patients with severe ACPE, in association with a conventional medical treatment, allows a prompt clinical enhancement along with a decrease of endotracheal intubations.

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