

Intensive Care Unit in the Emergency Department?



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INTRODUCTION

Emergency Physicians must be prepared to evaluate and to continue the treatment of resuscitated patients. The existence of ICU beds in the ER could optimize the patient rehabilitation and be less time consuming providing a better outcome and less co-morbidity.

METHODS

In this retrospective cohort study we examined 889 patients with Acute Respiratory Failure (ARF) and Cardio Pulmonary Arrest (CPA) transported to an ER by the Pre Hospital Emergency Medical Team (VMER) of Hospital São Francisco Xavier. All trauma and paediatric patients were excluded. The data are comprehended between January 2001 and March 2004 .

Pathologies

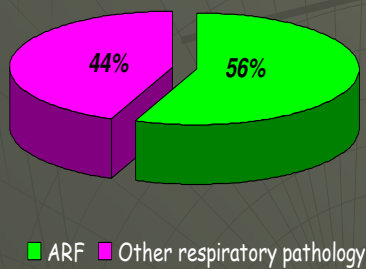


Fig. A

Results

With a median age of 67 yrs (16-94), the most frequent situation was ARF with 56,1% (499) of all patients (Fig. A). In this sub group COPD acute exacerbation and the Acute Pulmonary Edema (35% and 32%, respectively) were the major pathologies.

Asthma, Respiratory Infections and Airway Obstruction were also present but in small numbers (Fig B).

Aethiology of Acute Respiratory Failure

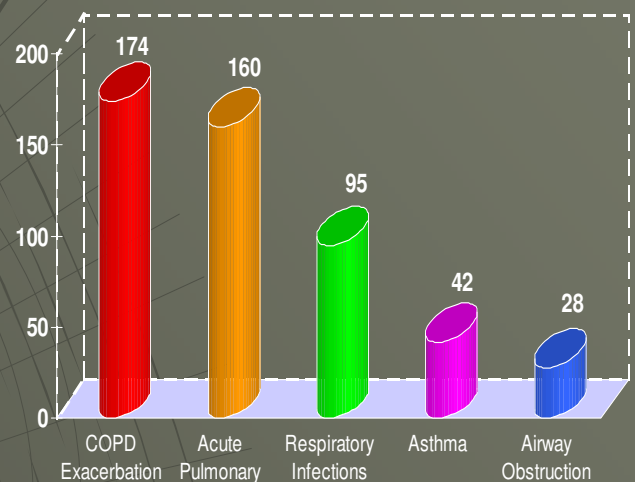


Fig. B

Specific pharmacotherapy was administered to all patients and in 44,1% (392) tracheal intubation and assisted ventilation was needed (Fig. C).

21% of CPA patients recovered pulse and were transported to an ER.

None of these patients had access to an ICU despite evaluation from the pre-hospital EMT and previous hospital communication.

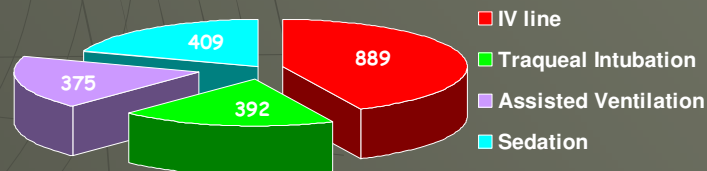


Fig. C

Conclusions

- ✓ Post resuscitation care is very important for the patient outcome.
- ✓ Despite the pre hospital high standard of care, none of the patients went directly to an ICU. Most, if not all, remained in the ER for a variable period of time, regardless of pathology, severity and even the need for mechanical ventilation.
- ✓ The reorganization of Portuguese Emergency Departments must take into account the population needs and the most specialized technicians in the ER, comprehending the presence of intensivists or the existence of protocols between ICU and ER with medical teams highly trained in emergency pathology.

References:

- 1) Sunyer J, Am. J. Respir. Crit. Care Med., Vol 158, N 3, Sep 1998, 851-856
- 2) Ontario Pre-hospital Advanced Life Support (OPALS) study, Vol 1, 1999