

European Respiratory Society Annual Congress 2012

Abstract Number: 3224

Publication Number: P2009

Abstract Group: 2.1. Acute Critical Care

Keyword 1: Acute respiratory failure **Keyword 2:** Ventilation/NIV **Keyword 3:** Intensive care

Title: Usefulness of noninvasive ventilation in patients with acute respiratory failure admitted in the intensive care unit (ICU) – Experience of a Portuguese ICU

Dr. Ana 27218 Castro anasfcastro@gmail.com MD ¹, Dr. Pedro 27219 Moura mourapm@net.sapo.pt MD ² and Dr. Aurora 28930 Cadeco aurora.cadeco@ulsam.min-saude.pt MD ². ¹ Pulmonology, Centro Hospitalar Vila Nova de Gaia- Espinho EPE, Vila Nova de Gaia, Portugal, 4434-502 and ² Intensive Care Unit, Unidade Local de Saúde do Alto Minho, Viana do Castelo, Portugal .

Body: Introduction:Noninvasive ventilation(NIV) is a safe and effective mean of improving gas exchange in patients with many types of acute respiratory failure(ARF). Study Design and Patient Selection:Retrospective observational study to access the usefulness of NIV in patients with ARF submitted to mechanical invasive ventilation(MIV) admitted to the ICU(Santa Luzia Hospital Viana do Castelo,Portugal).We enrolled adults with ARF admitted to the ICU in 2011.Patients were analyzed globally and in two subgroups: patients that received MIV and NIV and patients that received only MIV,recording various parameters, namely,comorbidities,diagnosis,SAPS II,APACHE II,presence of hypercapnia,pH, pCO₂,MIV duration,number of days in the UCI and release condition.The two groups were compared by the Chi-square and Mann-Whitney tests. Results:104 patients were included, mainly admitted for pneumonia(52%),other causes of ARF(23%) and COPD exacerbatation/hypercapnic acidemia (HA)(13%). 22(21%)received MIV and NIV and92(79%) only MIV.When analized the differences between groups,was found statistical significant differences regarding the diagnosis(p=,002),presence of hypercapnia(p=,005),MIV time(p=,015) and number days in the ICU(p<,001),but no differences when compared comorbidities,SAPS II,APACHE II,nutricional status,social dependence or release condition.NIV was used in patients with HA(36%) and difficult weaning(63%). Conclusion:NIV was effective in reducing the MIV time and number of days in the ICU probably because,in selected patients,it reduces the risk of ventilator-associated pneumonia,however no significant difference in mortality was observed.