European Respiratory Society
Annual Congress 2013

Abstract Number: 3605

Publication Number: P4931

Abstract Group: 2.1. Acute Critical Care

Keyword 1: Acute respiratory failure **Keyword 2:** Idiopathic pulmonary fibrosis **Keyword 3:** Mechanical ventilation

Title: Continuos positive airway pressure by helmet in exacerbation of idiopathic pulmonary fibrosis

Dr. Stefano 21998 Baglioni stefano.baglioni5@tin.it MD [1], Dr. Amir 21999 Eslami aeslami@tin.it MD [1], Dr. Patrizia 22000 Liuzzi cic.ser@alice.it MD [1], Dr. Marta 22001 Abbritti marta.abbritti@yahoo.it MD [1], Dr. Elvio 22710 Scoscia elvio.scoscia@alice.it MD [1] and Dr. Maurizio 29463 Dottorini maurizio.dottorini@gmail.com MD [1]. [1] Pulmonary and Respiratory Intensive Care Unit, S.M. Della Misericordia Hospital, Perugia, Italy, 06156 .

Body: The prognosis of acute exacerbation of idiopathic pulmonary fibrosis (AE-IPF)is very poor, and the role of conventional mechanical ventilation (CMV)in these patients is questionable. Noninvasive mechanical ventilation (NIV)has been used to avoid intubation and CMV in acute respiratory failure (ARF), including ARDS. NIV could have a role also reducing dyspnoea in this kind of patients. We describe the outcome of a group of 16 pts. suffering from AE-IPF, admitted to our four -bed Respiratory Intensive Care Unit (RICU) for ARF, treated with CPAP application by helmet. METHODS:Inclusion criteria: recent worsening of dyspnoea (within one month), severe hypoxemic ARF, diagnosis of IPF, CHEST X-ray or CT confirming IPF exacerbation, exclusion of other known causes of exacerbation. An informed consent was obtained from each patient.Microbiological tests included blood cultures and BAL. All pts. were treated with high-dose corticosteroids. CPAP was delivered through a high flow generator by helmet (Harol srl, MI, Italy); CPAP was applied with an initial PEEP of 10 cmH2O and a FiO2 set to mantain a SaO2≥ 92%. RESULTS: PaO2 improved significantly after CPAP application by helmet in the majority of subjects. 5 pts. required tracheal intubation and CMV, 9 died (56%) during RICU stay, one pt. passed away after discharge to general ward. 4 refused intubation. Only one among the intubated patients survived. Mean duration of CPAP application was.7.7± 2.9 days, global tolerability was good (only 1 made the decision to stop helmet after few hours). CONCLUSION: CPAP application by helmet in AE-IPF could be an accettable modality of treatment, improving PaO2, reducing dyspnoea and avoiding CMV.