Conclusion: Suitable and therapy on time allows normal and healthy life and free activity with children who have proved rhynitis alergica.

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NON INVASIVE VENTILATION IN PEDIATRIC INTENSIVE CARE UNIT

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Objective: The aim of this study was to investigate the benefit of the Non Invasive Ventilation (NIV) in children admitted to the Pediatric Intensive Care Unit (PICU).

Methods: We studied 22 children supported by NIV, aged 1 month to 15 years. The duration of the study was 4 years (January 2006- December 2009). The total number of admissions to ICU during this period was 759 (2,9% supported by NIV).

The causes of the respiratory failure in these children supported by NIV were: chronic diseases-infection (n=11; 50%), neuromuscular diseases (n=4; 18,18%),renaltransplantations-immunosuppression (n=3; 13,63%), leukemias (n=2; 9,09%), respiratory infections (n=2; 9,09%).

We selected the Biphasic Ventilation mode (Bi-Vent) by facial mask, because our patients were in severe respiratory distress. The parameters in this mode were as follow: PIP: 10-16 cmH2O and PEEP 6-12 cmH2O. The mean duration of NIV was 4 days (3 hours to 14 days).

Results: Facial mask was well tolerated and with no injuries from her use. Results showed that 19 patients (86,36%) recovered and 3 patients (13,63%) died because of their underlying disease and not from the respiratory failure. Two of our patients continued the NIV ventilation as home care treatment.

Conclusions: NIV support of respiratory failure is a very useful tool in the pediatric intensivists' hands because it is good alternative to mechanical ventilation. It is well tolerated, reduces the need of sedation and the PICU stay in these patients.

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INFLUENZA A H1N1 VIRUS INFECTION IN A PEDIACTRIC INTENSIVE CARE UNIT

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Background: the main form of clinical presentation in critically ill patients with H1N1 infection is rapidly progressive respiratory failure, shock, neurological involvement and renal failure. Children with co-morbidity and aged < 2 years are at particular risk.

Methods: a descriptive, retrospective study on the clinical presentation and management of patients with H1N1 infection was performed in a Pediatric Intensive Care Unit (PICU). All children admitted in PICU of Coimbra´s Pediatrics Hospital (CPH) were described, from July 15th to November 30th of 2009.

Results: during this period, 241 children with laboratory confirmation of H1N1 infection were observed in CPH, of whom 38 (16%) required hospitalization, 4 (1.7%) in PICU-CPH. The age ranged from 4 months to 21 years. Three patients had previous co-morbidities. All met clinical criteria for H1N1 infection and were admitted with respiratory distress (4), rapidly progressive and evolution to ARDS (2), associated with shock (2) and lethargy (2). Three patients required mechanical ventilation (conventional and high-frequency oscillatory ventilation); the duration ranged between 4-12 days. Two patients received intravenous catecholamines support, two developed acute renal failure and two had pancytopenia. There were two bacterial co-infections. All received treatment with oseltamivir. Length of PICU stay ranged from 5-22 days, with a favorable outcome in all cases.

Conclusion: in the 1st peak of H1N1 outbreak, 10% of the hospitalized children required PICU admission. Despite severe respiratory disease and multiple organ dysfunction, a good outcome was achieved, with no mortality.