

Category : **Sepsis/septic shock: management**

A74 - Immunoglobulins combined with antibiotics improve outcome of patients with severe pneumococcal pneumonia. A retrospective observational study

M Benlabeled¹ ; S Benlabeled² ; R Gaudy³ ; S Nedjari⁴ ; A Ladjouze⁵ ; S Aissaoui⁵

¹Lille University, Anesthesiology, Lille, France, ²Free University of Brussels, Internal Medicine, Brussels, Belgium, ³Lille University, Internal Medicine, Lille, France, ⁴Algiers University, Algiers, Algeria, ⁵Algiers University, Anesthesiology, Algiers, Algeria

Introduction:

The role of intravenous immunoglobulin (IVIG) as an adjunctive treatment for severe sepsis remains controversial. We hypothesized that IVIG associated with antibiotics could be more effective than antibiotics alone for treating patients with severe pneumococcal pneumonia

Methods:

We performed a retrospective study and analyzed the data of 2 groups of 20 patients presenting severe pneumococcal pneumonia and admitted in an university ICU between 2015 and 2019. All The patients were 60+-10 years old and mechanically ventilated .

On admission, a first group receiving IVIG and antibiotics (study group) and a second group receiving placebo (saline) and antibiotics (control group) . IVIG were administered on the first hour of admission at a dose of 0.5g /kg during 3 days and infused continuously at 3ml/kg/h.IVIG were preceded by administration of ceftriaxon -levofloxacin.

We recorded in the 2 groups : CRP, SOFA score Day1 and Day 4, Time on mechanical ventilation(MV) , Pao2/Fio2 ratio on day 1 and day 3, the incidence of septic shock, ICU stay , the hospital length of stay (LOS) and 28 day mortality.

Results:

Stastical analysis used Mann Whitney test and results expressed as Mean with Standard deviation see(Table 1).

We observed that SOFA score Day 3 , Time on MV, ICU stay and LOS were significantly reduced in study group compared to control group. Pao2/Fio2 Day3 was more elevated in study group than in control group. respectively 220+-5 vs 180+-6 p<0.001. Septic shock was present in 10 patients sur 20 in control group and in 6 patients sur 20 in study group.

Day 28 mortality was significantly decreased in study group compared to control group respectively 30% vs 50%.

Conclusion:

Early administration of high doses IVIG combined with antibiotics improved outcome of patients with severe pneumococcal pneumonia[1] . A randomized controlled study , including a large population of patients is needed to confirm these interesting results.

References:

1.L. DE Hennezel. et al. Antimicrob. Agents Chemother 316–318 ,2001

Table:

	Study group	Control group	P
SOFA Score Day 4	4.53+-0.71	7.22+-072	<0.0001
ICU STAY (days)	11.93+-0.45	16.86+-0.55	<0.0001
LOS (days)	23.06+-0.88	29.4+-1.12	<0.004

Septic shock %	30%	50%	<0.001
Time on MV(days)	6.76±0.41	9.86±0.26	<0.0007
CRP day 2(mg/l)	14±2	47±5	<0.0001
Pao2/Fio2 ratio Day 3	220±5	180±6	<0.001

Variables related to outcome in study and control groups