

A. GONZÁLEZ-FERNÁNDEZ¹, M. IBAÑEZ CARRILLO¹, O. GUILLEN MARTINEZ¹, A.C. MURCIA LOPEZ¹, MC. MATOSES-CHIRIVELLA¹, A. NAVARRO RUIZ¹.

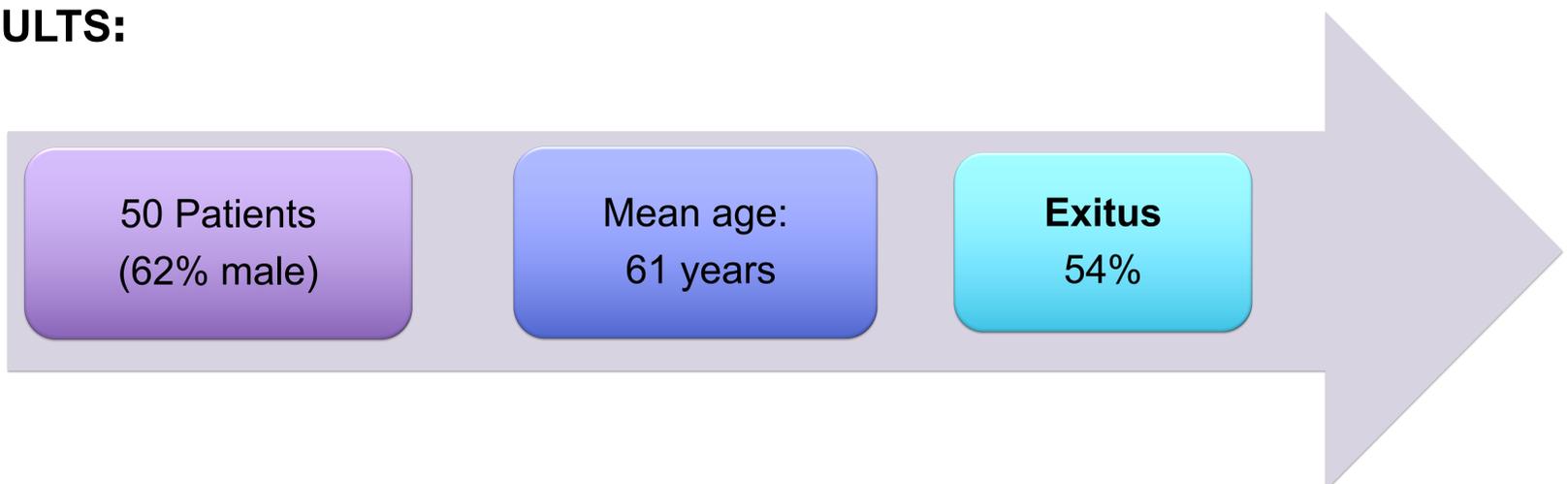
¹Hospital General Universitario de Elche, Pharmacy, Elche, Spain.

OBJECTIVES: The aim of this study was to analyse sodium and magnesium electrolyte disturbances associated with mechanical ventilation on critically ill patients with Covid-19 requiring PN.

METHODS:

- ✓ Retrospective observational study (January-April 2021).
- ✓ 50 Patients with SARS-CoV-2 admitted to Critical Care Unit (CCU) who required PN.
- ✓ We analysed the variables of sex and age and the analytical values of sodium and magnesium during PN supplementation, as well as the contribution of these ions during PN supplementation. Na and Mg ions were not supplemented in NP, in patients with high levels.

RESULTS:



	Na (meq/L)	Nº patients (%)	Mg (mg/dL)	Nº patients (%)
Before NP	↑ 150,3 (145-165)	16 (32)	↑ 2,5 (2,2-3,4)	23 (46)
	↓ 134	1 (2)	↓	0
	normal	33 (66)	normal	27 (54)
During NP	↑ 150,7 (146-159)	15 (30)	↑ 2,4 (2,2-2,8)	24 (48)
	↓ 132	1 (2)	↓ 1,4	1 (2)
	normal	34 (68)	normal	25 (50)

Tabla 1. Sodium and magnesium alterations found, before and during PN supplementation.



Of the total number of patients, 5 developed hypermagnesaemia and 3 hypernatraemia during PN supplementation.

DISCUSSION AND CONCLUSIONS:

Critically ill patients with SARS-CoV-2 had a high percentage of sodium and magnesium levels, 32% and 46% respectively, at the time of starting PN, mainly associated with the use of mechanical ventilation. These alterations continued during PN supplementation in most cases.