MANAGEMENT OF HYPONATREMIA IN PATIENTS WITH TOTAL ENTERAL TUBE FEEDING (TEN), ARE WE DOING IT RIGHT?

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RATIONALE

The appropiate treatment of non-severe hyponatremia according to the clinical guidelines should be fluid restriction-FR-(<1 liter) in euvolemic patients, furosemide in hypervolemic and isotonic saline (IS) in hypovolemic.

The aim of this study was to know the current management of hyponatremia in patients with TEN.

METHODS

An observational prospective study was developed for 24 months. The study was designed in non-critically patients receiving TEN who presented hyponatremia.

Sex, age, clinical volemia, type of treatment (FR, furosemide, IS) and serum sodium levels were collected before and 72 hours after the start of treatment. Total volume of fluid (TEN and addition non-TEN iv fluids) were also included before and during hyponatremia treatment in patients with TEN.

RESULTS

29 patients were included, 58,9% males, age 76 (IR 68-84) years.

Euvolemic hyponatremia was the most common (Figure 1).

All of them received treatment for hiponatremia. This treatment was appropiate in 100% hypovolemic; 65,3% euvolemic and 50% hypervolemic patients.

In euvolemic patients total volume during hyponatremia management was 1800 (IR 1600-2200)mL: 1200 (IR 1000-1332)mL of TEN and 800 (IR 600-800)mL of non-TEN iv.

Eunatremia (Serum sodium > 135 mmol/L) was reached by 48,3%: (50% of hypervolemic and 54,1% of euvolemic patients). Eunatremia was more common in patients with adequate treatment (Figure 2)

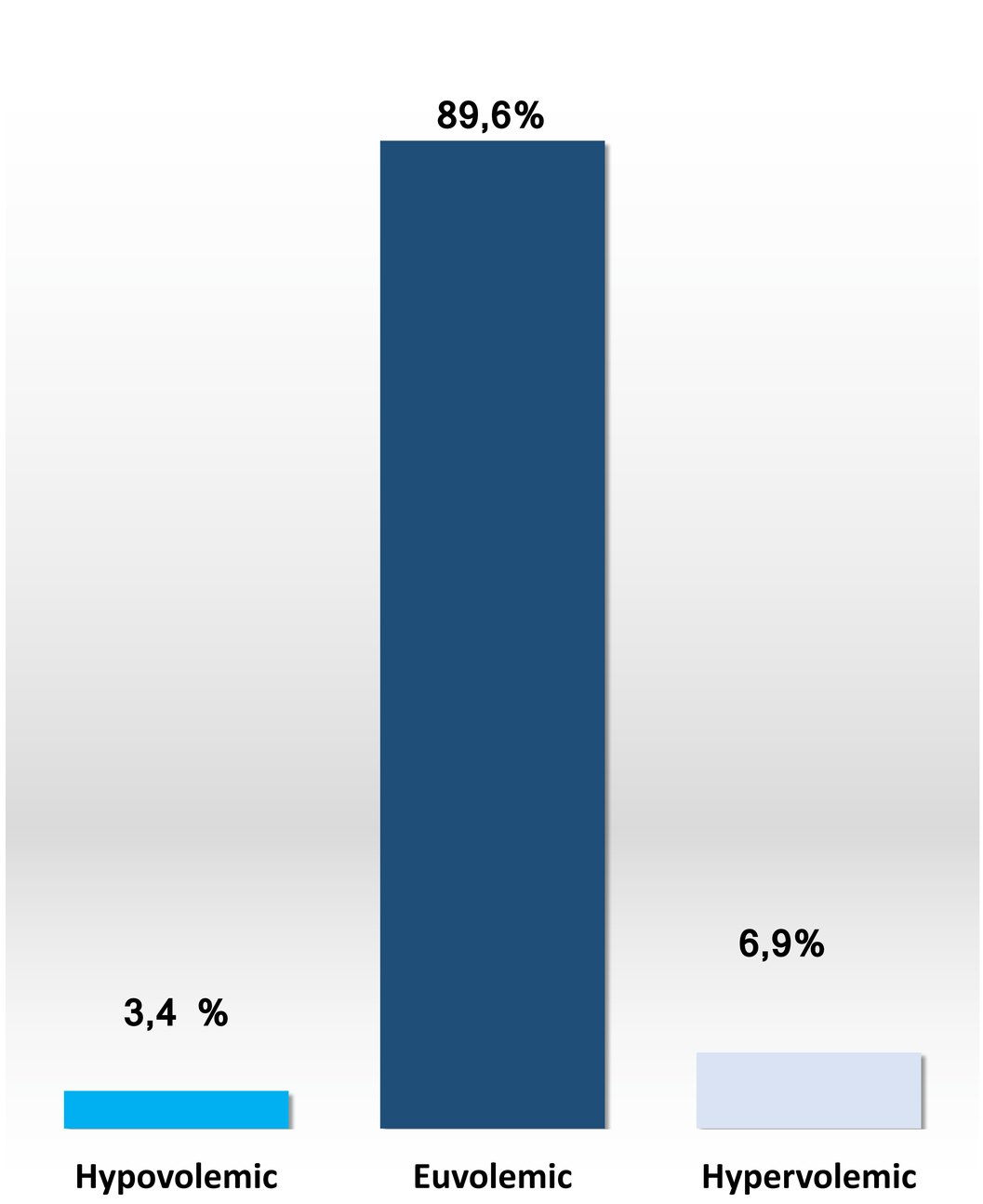

Figure 1. Etiological hyponatremia distribution of study population.

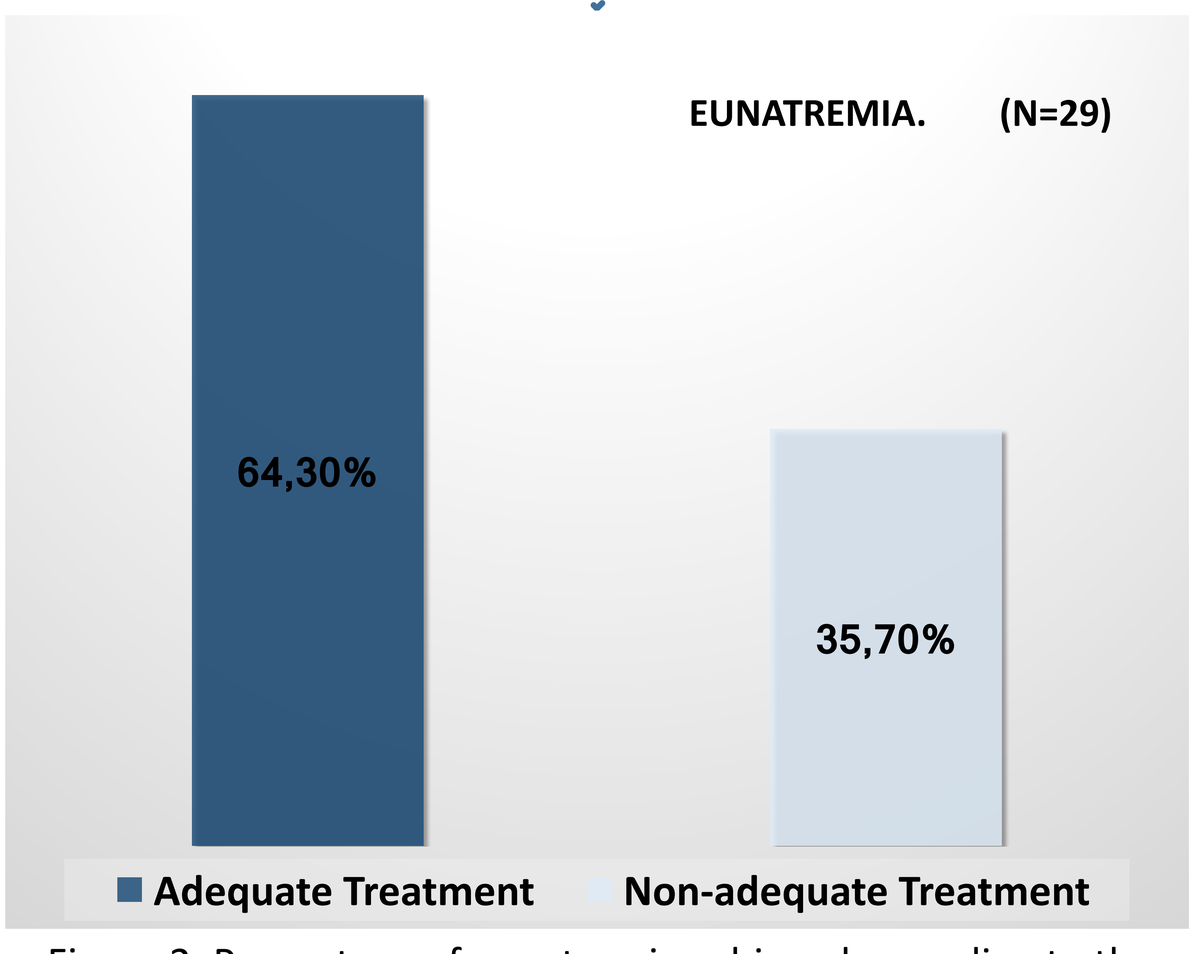

Figure 2. Percentage of eunatremia achieved according to the adequate and non-adequate treatment. (p=0,555)

CONCLUSION

- Eunatremia was more frequent in patients with appropriate treatment.
- However, in euvolemic patients with hyponatremia it is difficult to establish the appropriate treatment. In these patients, the fluid restriction to less than 1 liter is not possible.