







## REVIEW OF METABOLIC AND ELECTROLYTIC ALTERATIONS IN PATIENTS WITH ENTERAL NUTRITION

MC Conde García, JL Sánchez Serrano, B Proy Vega, C Notario Dongil, P Araque Arroyo, MT Gómez Lluch

Pharmacy department. Hospital General La Mancha Centro. Alcázar de Juan. Ciudad Real (Spain)





Some complications described with enteral nutrition (EN) administration are metabolic and electrolyte disturbances.

To review glycaemic, renal and electrolyte alterations in patients receiving EN as exclusive diet.

## Material and methods

All patients admitted except those hospitalised in the Intensive Care Unit who received EN during the study period (January to March 2017) were retrospectively reviewed using the Farmatools® prescription program. Only those who covered at least 75% of their requirements (calculated using Harris Benedict equation and taking into account the stress factor) along this route and who received at least 5 days of EN were included.

Variables registered, before beginning EN and after 5 days of treatment were: glycaemia, serum creatinine, serum sodium and potassium, and GOT and GPT values. Hyperglycaemia was considered as an increase with respect to baseline glucose of at least 20%, and altered creatinine as increase by at least 30%, both of them with a value above the recommended range.

## Results

During the study period, 45 patients received EN and 21 (46.7%) covered 75% of their requirements. 57.1% were males and 42.9% females, with a mean age of 72.6 years.



Of the total number of patients evaluated, 5 presented hyperglycaemia (8.9%), 1 hyperkalemia (2.2%), 2 GOT elevation (4.4%) and 4 GPT elevations (8.8%). None of them presented creatinine value elevation.

## Conclusion

■ Not covered 75%

It is necessary to carry out a greater nutritional follow-up to patients admitted to our hospital who receive EN because half of them do not have their nutritional requirements covered. We have not detected significant alterations in the glycaemic, electrolytic and renal results, which is a reason why EN can be considered a safe type of nutritional support from the metabolic and electrolytic point of view.

