STUDY OF THE CHARACTERISTICS OF PATIENTS TREATED WITH TOLVAPTAN

M.A. GONZÁLEZ [1], N. FERRERAS[1], I. ALVAREZ[1], M. GUERRA[1], J.J. ORTIZ DE URBINA[1], G.M. FLORES[2].

[1]Complejo Asistencial Universitario de León, hospital pharmacy, León, Spain.
[2]Complejo Asistencial Universitario de León, cardiology, León, Spain.

Background:
Syndrome of inappropriate antidiuretic hormone secretion (SIADH) is one of the most frequent causes of hyponatremia. Conventional treatments don't act on the vasopressin V2 receptor, are limited and with variable efficiency. Tolvaptan is the first selective vasopressin V2 receptor antagonist, administered orally and suitable for the treatment of hyponatremia associated with SIADH.

Purpose:
To study the characteristics of patients treated with tolvaptan, analyzing the causes of hyponatremia, their analytical situation and their home treatments involved in the decrease of the sodium concentration.

Material and methods:
A descriptive and retrospective study of patients treated with tolvaptan since 2014. Data were obtained from medical records. The suitability of the treatments was established based on RUNKLE, Isabelle, et al treatment algorithms and home treatments' possibility of causing hyponatremia as an adverse effect was reviewed.

Results:
22 patients (13 men and 9 women) with a mean age of 73 years were treated with tolvaptan. Possible causes of hyponatremia were: cerebrovascular 5/22; secondary to psychiatric treatment 6/22; cirrhosis 1/22, oncological pathology 3/22 multifactorial 5/22; undefined 2/22. Blood tests show that 5/22 patients had severe-moderate hyponatremia and 17/22 mild-moderate hyponatremia. Subsequently, the Furst Formula was calculated and patients were classified accordingly in order to evaluate the suitability of the treatments for sodium value correction. In all cases, the proposed algorithms were followed, obtaining normal values of sodium after the use of tolvaptan.
When reviewing pre-admission treatments, 10/22 patients were being treated with one or more drugs that could produce hyponatremia (cisplatin, valproic acid, hydrochlorothiazide, duloxetine, mirtazapine and / or sertraline).

Conclusion:
The use of tolvaptan allowed to obtain plasma concentrations of sodium within normal ranges. However it is important to know the factors that can trigger the SIADH as well as to handle the correct treatment algorithms. On the other hand, to emphasize the importance of knowing the adverse effects of the drugs in patients who are admitted to a hospital.

References and/or Acknowledgements:
RUNKLE, Isabelle, et al. Tratamiento de la hiponatremia secundaria al síndrome de secreción inadecuada de la hormona antidiurética: algoritmo multidisciplinar. *Nefrología (Madrid)*, 2014, vol. 34, no 4, p. 439-450.

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