



Título: HIPONATREMIA OCASIONAL LEVE EN EL PACIENTE HOSPITALIZADO. RELACIÓN CON LA MORBIMORTALIDAD Y COSTE DE LA ASISTENCIA

Nombre: Fernández Landázuri, Sara

Universidad: Universidad de Navarra

Departamento: Bioquímica y genética

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Dirección:

> **Director:** José Ignacio Monreal Marquiegui

> **Codirector:** Francisco Javier Lavilla Royo

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> **vocal:** Luis Alfonso Gurrutxaga

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El fichero de tesis no ha sido incorporado al sistema.

Resumen: Mild occasional hyponatremia in hospitalized patients. Association with morbimortality and health care costs.

Sara Fernández Landázuri. Science Faculty. University of Navarra. 2016

Hyponatremia is the most common hydroelectrolytic disorder both in hospitalized and in outpatients. The prevalence of hospital hyponatremia is 15-40% and it affects particularly to oncologic population. Eighty percent of the hyponatremia cases are identified as mild. Populations at risk of developing hyponatremia are people of advanced age, prepubertal children and women, people undergoing surgery or with comorbidities. Hyponatremia is more prevalent in diseases such as congestive heart failure, liver cirrhosis, chronic kidney disease, neurologic diseases and cancer.

We performed a retrospective study in the Clínica Universidad de Navarra with 13,196 hospitalized patients



between January 1st 2008 and December 31st 2011. The aims of the retrospective study were: 1) to determine the prevalence of hospital hyponatremia and its distribution by medical and surgical specialties and 2) to evaluate the association of mild hyponatremia with mortality, morbidity and healthcare costs during the detection time and after 3 months, one year and 4 years of follow-up.

Additionally, we performed a prospective study conducted with 174 patients treated at the Oncology department from April 2013 to March 2014. The aims of the prospective study was to evaluate the association of mild hyponatremia with the clinical state by analyzing prospectively the morbidity, mortality, complications of the disease and associated costs of oncology patients during their hospitalization and the 90-day period after the detection of their hyponatremic episode.

The prevalence of hyponatremia during the study period was higher in patients from Oncology (60.4%), followed by Nephrology, Hepatology. Mortality in patients with hyponatremia during hospitalization was higher in all analysed periods (Hospital stay: 1.57 [95% CI: 1.34-1.83]; 3 months: 2.65 [95% CI:2.35-2.97]; One Year: 2.44 [95% CI:2.24-2.65]; Four years: 1.85 [95% CI:1.75-1.96]. Hyponatremic patients required longer hospital stays at the time of detection and in subsequent readmissions, have increased fall risk and reported falls, and greater complexity. The cost associated with hyponatremia was 4,000-5,000 more than in patients with normonatremia. In our prospective study we reproduce the same previous results. We tried to classify hyponatremia by osmolality and the risk of developing SIADH but for both these parameters the hyponatremic population showed no significant differences, clearly indicating that this classification does not provide more information than the information obtained by the detection of the hyponatremia in itself. But nevertheless, we observed that the correction of hyponatremia was associated prospectively with improved survival (during hospitalization and in the 90-day period after the natremia was tested). The cost of pharmacy in this study indicates that hyponatremia may be an iatrogenic condition, especially by the use of diuretics, cytostatics and mainly plasma substitutes and solutions for infusion.