

# HYPONATREMIA IN PATIENTS HOSPITALISED IN A MEDICAL ONCOLOGY UNIT: SOMETHING NOT TO UNDERVALUE

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## INTRODUCTION & OBJECTIVES

### Introduction:

Hyponatremia (plasmatic sodium lower than 135 mEq/L) is the most frequent electrolytic alteration in patients with malignancies<sup>1</sup>.

According to NCI-CTCAE (version 4.03)<sup>2</sup> classification it can be divided into three degrees:

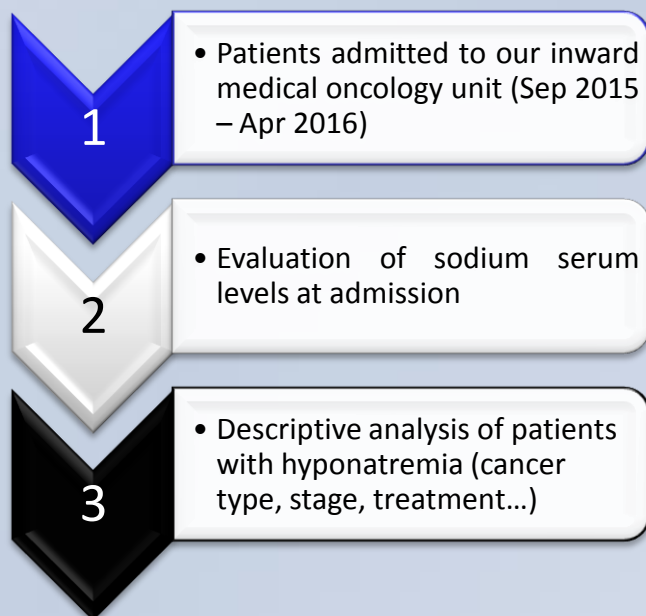
- I grade: 135 – 130 mEq/L,
- III grade: 130 – 120 mEq/L,
- IV grade: < 120 mEq/L (potentially fatal).

### Objectives:

We wanted to analyse the incidence of hyponatremia in hospitalised patients and their clinical characteristics.

## METHODS

We analysed patients hospitalised between September 2015 and April 2016 in our Medical Oncology Unit (Hospital S. Chiara, Pisa, Italy). The determination of natremia was made at the admission and analysed in the same laboratory.



Method of our analysis

## RESULTS

We analysed 178 patients for a total of 276 blood samples (several patients underwent different hospitalisations).

We found 59 patients (33.15%) with hyponatremia. Seven patients experienced different episodes of hyponatremia, leading to 69 samples positive for hyponatremia.

More precisely, 55 patients in 58 (84.06%) samples had grade-1, 8 patients in 8 (11.59%) samples grade-3, and 2 patients in 3 samples (4.35%) grade-4 hyponatremia.

The most frequently associated malignancies were head-and-neck (22.03%), colorectal (15.25%), NSCLC (11.86%), and SCLC (1.69%).

The majority of patients were on best supportive care (40.68%), while patients on treatment had often received cisplatin (22.03%) or carboplatin (10.17%).

Clinical Chacteristics in hyponatremic pts	Number of patients (%)
<b>Type of tumour</b>	
•Head and Neck	13 (22.03%)
•Colorectal	9 (15.25%)
•NSCLC	7 (11.86%)
•SCLC	1 (1.69%)
<b>Received treatments</b>	
•Supportive care	24 (40.68%)
•Cisplatin	13 (22.03%)
•Carboplatin	6 (10.17%)

Clinical characteristics of pts with hyponatremia

## CONCLUSIONS

Our study confirms the high frequency of hyponatremia in oncological patients.

This alteration, though being more frequent in some settings (such as, patients with head-and-neck and lung cancers, patients receiving platinum compounds), can be found in patients affected by any kind of tumour, in any stage, receiving any treatments.

This high frequency underlines the importance of the surveillance of the electrolytes, whose alterations might have important consequences that might be avoided with a correct and early management of these patients.

## REFERENCES

1. Hyponatremia in hospitalized cancer patients and its impact on clinical outcomes. Doshi SM<sup>1</sup>, Shah P, Lei X, Lahoti A, Salahudeen AK. Am J Kidney Dis. 2012 Feb;59(2):222-8. doi: 10.1053/j.ajkd.2011.08.029. Epub 2011 Oct 15.
2. [https://evs.nci.nih.gov/ftp1/CTCAE/CTCAE\\_4.03\\_2010-06-14\\_QuickReference\\_5x7.pdf](https://evs.nci.nih.gov/ftp1/CTCAE/CTCAE_4.03_2010-06-14_QuickReference_5x7.pdf)