## Case Report Hyponatremia in malignant neoplasia: A case report

 $Diana\ G{\sf EMANARI}^{\, {\sf I}},\ A{\sf lina}\ D{\sf OBROTA}^{\, {\sf I},2},\ C{\sf amelia}\ C{\sf ristina}\ D{\sf IACONU}^{\, {\sf I},2,3}$ 

**Corespondence to:** Diana GEMANARI, Department of Internal Medicine, Clinical Emergency Hospital of Bucharest, Bucharest, Romania, email: <a href="mailto:diana.gemanari@gmail.com">diana.gemanari@gmail.com</a>

## **Abstract:**

Hyponatremia is a frequent electrolyte imbalance with diverse etiology that may occur secondary to chemotherapy or autoimmune pathologies. We report the case of a 76-years-old female who presented for symptoms of severe hyponatremia like digestive intolerance, nausea, vomiting, generalized muscle weakness and vertigo, with a serum sodium level of 110 mEq/L. The patient was known with multiple cardiovascular and malignant comorbidities, being diagnosed with a right breast neoplasm with right radical mastectomy and axillary lymphadenectomy. Subsequently, multiple adenopathies were detected, which is why the patient followed several series of chemotherapy with trastuzumab and capecitabinum. These drugs can cause side effects, such as xerophthalmia, xerostomia, which are also frequently encountered in autoimmune pathologies. Hyponatremia is one of the most frequent side effects of capecitabinum. All these side reactions were investigated later, thus following the immunological tests, the diagnosis of Sjogren's syndrome was established. After ruling out other causes, it was established that hyponatremia appeared secondary to the recent administration of capecitabinum or within a syndrome of inappropriate antidiuretic hormone secretion (SIADH), which can be the result of a Sjogren's syndrome.

**Keywords:** hyponatremia, Sjögren syndrome, malignant neoplasia

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## 1. Introduction

Hyponatremia, defined as a serum sodium concentration less than 135 mmol/L, is one of the most frequent causes of hospitalization. This can appear as an epiphenomenon secondary to chemotherapy or in very rare cases it can appear within a syndrome of inappropriate antidiuretic hormone secretion (SIADH). SIADH can appear in Sjogren's

syndrome, an autoimmune pathology, which can be triggered in a neoplastic context <sup>1,2</sup>.

## 2. Case presentation

A 76-year-old-female presented for digestive intolerance, nausea, vomiting, generalized muscle weakness and vertigo, with onset 4 days before. The patient was known with multiple cardiovascular and neoplastic comorbidities. Ten years

<sup>&</sup>lt;sup>1</sup>Department of Internal Medicine, Clinical Emergency Hospital of Bucharest, Bucharest, Romania

<sup>&</sup>lt;sup>2</sup>Department of Internal Medicine, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

<sup>&</sup>lt;sup>3</sup>Academy of Romanian Scientists