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Severe hyponatremia secondary to preparation for colonoscopy with sodium picosulfate/magnesium citrate

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Key words: Hyponatremia. Sodium picosulfate. Colonoscopy.

Dear Editor,

The number of colonoscopies has been increasing in Spain due to the program for the early detection of colon cancer. This program undoubtedly has benefits. However, we must not forget that it is not free of risks, both from the technique itself and the preparation with oral solutions.

Case report

I present the case of a 78-year-old female with a history of surgically treated rectal cancer as well as hypothyroidism which was under treatment. She was admitted to the Intensive Care Unit (ICU) due to electrolyte disturbance (108 mmol/l natremia) with CNS alterations (disorientation and dizziness). After an initial treatment with 3% hypertonic saline, she had a good evolution and made a full recovery in the first 72 hours.

Discussion

Severe hyponatremia is defined as natremia lower than 125 mmol/l that is associated with severe symptoms, especially neurological. The correction of the condition must be cautious, in order to avoid central pontine myelinolysis (1) due to an excessive release of intracellular water.



On the other hand, the profitability of a colonoscopy is largely due to a good preparation, which ensures a good cleaning, is easy to administer and has few adverse effects. The use of Citrafleet[®] has been increasing due to the fact that it is as effective as other solutions but is easier to administer. However, it has undesired effects, which are usually mild (abdominalgia) but can become serious in some cases when associated with other factors (2,3). These include advanced age, use of diuretics and hypothyroidism substitution treatment, as is in the case presented here. The appearance of neurological symptoms is more frequent in elderly patients on diuretic therapy.

Therefore, the use of Citrafleet[®] in patients with cardiopulmonary, renal or hepatic diseases (1,4) is not currently recommended and should be used with caution in elderly patients, especially those under diuretic treatment (4,5).

References

1. Costa JM, Soares JB. Symptomatic hyponatremia after bowel preparation. Acta Med Port 2017;30(11):824-6. DOI: 10.20344/amp.8794

2. Weir MA, Fleet JL, Vinden C, et al. Hyponatremia and sodium picosulfate bowel preparations in older adults. Am J Gastroenterol 2014;109(5):686-94. DOI: 10.1038/ajg.2014.20

3. Cho YS, Nam KM, Park JH, et al. Acute hyponatremia with seizure and mental change after oral sodium picosulfate/magnesium citrate bowel preparation. Ann Coloproctol 2014;30(6):290-3. DOI: 10.3393/ac.2014.30.6.290

4. Forde H, O'Shea T, Davenport C, et al. Acute symptomatic hyponatremia following sodium picosulfate/magnesium citrate as bowel preparation for colonoscopy: a case series. Case Rep Clin Med 2014;3:101-4. DOI: 10.4236/crcm.2014.32025

5. Frizelle FA, Colls BM. Hyponatremia and seizures after bowel preparation: report of three cases. Dis Colon Rectum 2005;48(2):393-6. DOI: 10.1007/s10350-004-0778-6