

Title:

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**SYMPTOMATIC HYPOMAGNESEMIA INDUCED BY PROTON-PUMP INHIBITORS (PPIs).
A KNOWN ADVERSE EVENT THAT IS WORTH RECALLING.**

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Dear Editor,

In 2016 the *Sociedad Española de Patología Digestiva* published a paper on the adverse effects of PPIs, including a position statement on their safety, with the conclusion that they are uncommon and usually of little import. Magnesium deficiency was assessed among PPI adverse events (1).

Here we report a case of symptomatic hypomagnesemia induced by PPIs.

A 75-year-old male with ileocolic Crohn's disease (CD) since age 15, in sustained clinical remission on azathioprine, had been taking pantoprazole 40 mg/day for several years to treat heartburn. He had been assessed by Internal Medicine for the past few months because of occasionally disabling hand tremor that was attributed to hypomagnesemia, and had mildly improved with oral magnesium. Hypomagnesemia was hesitantly considered to be caused by CD. After a new etiological assessment its association with the patient's PPI therapy was placed lowest in the list of potential causes. After PPI discontinuation the patient improved over a few days, and was asymptomatic with normal magnesium levels after two weeks. Hypomagnesemia did not recur subsequently while on treatment with an H2 agonist.

In 2011 the *Agencia Española del Medicamento* alerted on the possibility of hypomagnesemia occurring secondary to therapy with PPIs, which was confirmed by

subsequent studies (2-4). Hypomagnesemia may be asymptomatic or cause mental confusion, tetany, seizures, or hand tremor as in the case reported herein (5). Diagnostic delay results from initial consideration of other etiologies, as was the case with our patient with CD, and is likely favored by inadequate awareness of this adverse event. Response to PPI discontinuation is excellent. With the present communication our aim was to remind readers of this uncommon PPI-related adverse event, which when overlooked prompts unnecessary testing and above all results in impaired quality of life.

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