

Symptomatic hypomagnesemia and proton pump inhibitors

Sir,

We read with interest the report by^[1] Wang *et al.* titled "a case of symptomatic hypomagnesaemia in medical intensive care unit that is strongly related to PPIs".^[1] In fact, symptomatic hypomagnesemia and PPI is sporadically mentioned. In the case series by Mackay and Bladon the problem is common among the elderly with long-term use of PPI, and the stopping of PPI can dramatically improve the problem.^[2] Of interest, not all patients receiving PPI develop symptomatic hypomagnesemia. The possible relationship to a serious disease, Zollinger–Ellison syndrome, is mentioned.^[3] Focusing on the present report, the case in intensive care context is reported. The problem of hypomagnesemia is not an extremely rare condition. As noted by Ayuk and Gittoes, "hypomagnesaemia is relatively common, with an estimated prevalence in the general population ranging from 2.5% to 15%"^[4] and this can be due to many factors, not specific to use of PPI. In addition, according to a report by Deshmukh *et al.*, 70% of patients in critical care unit had hypomagnesemia, despite no history of PPI

use.^[5] The nutritional problem seems to be an important factor leading to hypomagnesemia.^[4,5] Hence, finding of hypomagnesemia in the patient receiving PPI might not imply that PPI is the cause of the problem. Finally, the routine electrolyte investigation usually does not cover serum magnesium. Hence, the problem might be under- or late-diagnosed. Critical care unit practitioners should regularly monitor the serum magnesium of the patient to detect the problem early.^[6]

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