

## supportive care

1516P **HYPOMAGNEAEMIA IN CANCER PATIENTS:  
UNDERESTIMATED PROBLEM? WHEN SUPPORTIVE CARE IS  
DETRIMENTAL: THE EXAMPLE OF PROTONIC PUMP  
INHIBITORS**

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**Aim:** Magnesium ( Mg) is an important cofactor for many enzymes and metabolic reactions. Serum Mg levels<1.5 mg/dl or to 1.2 mEq/L indicate a deficit. In oncology various factors may cause Mg decrease: diet, intestinal malabsorption, paraneoplastic syndromes, increased renal excretion, sepsis or antibiotics, diuretics. Many drugs in oncology are involved in HypoMg : cisplatin, oxaliplatin, antiEGFR monoclonal antibodies, zoledronic acid for example. Protonic pump inhibitors ( PPI) use, well known cause of Hypo Mg, in cancer supportive care is increasing. To our knowledge

Oncologist's awareness about this aspect is not so complete. For this reason we investigated in our Services Hypomagnesemia prevalence related to the use of PPI.

**Methods:** We analyzed a total of 168 patients (age: 39- 84 years, median age: 68 aa) in actual active treatment and concomitant PPI. We stratified them according to diagnosis, cancer protocol, stage of disease, comorbidities (particular renal failure) and other drugs.

**Results:** 23 (11 of them with metastatic disease) out of the 168 pazienti in PPI treatment (13.7%) had hypomagnesemia (range: 1.2 mg/dl -1.6 mg/dl nv : 1.8-2.5 ). Of the 23 patients: 2 assumed diuretics, 1 was under cisplatin, 1 oxaliplatin and 2 zoledronic acid. Diagnosis included: 7 breast cancers, 5 lung cancers, 2 colon cancers, 1 prostate cancer, 3 lymphoma, 2 myeloma, 1 kidney, 1 pancreas, 1 liver cancer. In the other 17 patients (10.1% ) no other causes were identified. Of these 17 patients : 8 had metastatic disease. Common feature of this hypoMg was its persistence notwithstanding supplementation with oral or ev magnesium and dietary advice. Patients common complaints were : fatigue and muscle weakness, irritability, insomnia. No relevant abnormality in ECG.

**Conclusions:** PPI are commonly used in oncology but related hypomagnesemia is probably underestimated and many common symptoms as fatigue but also neuropathy might be worsened by it. Taking into account this problem might easily improve the QoL of our patients. Not everything that happens in a cancer patient is cancer related.

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