DEHYDRATION IN HIP-FRACTURE ELDERLY PATIENTS: PREVALENCE AT ADMISSIONE AND ASSOCIATIONS

[1]De Colle P, [1]Omiciuolo C, [2]Murena L, [3]Sanson G, [4]Zanetti M

[1]S.C. Geriatria, ASUGI, Trieste Italy

[2]UCO Clinica Ortopedica, ASUGI-Università degli Studi di Trieste, Italy

[3]Università degli Studi di Trieste, Italy

[4]UCO Clinica Medica, ASUGI-Università degli Studi di Trieste, Italy

Background: Dehydration is common in elderly patients both and it is associated with adverse clinical outcomes.

Aims: To assess its prevalence at hospital admission and its associations in a cohort of elderly patients with hip fracture.

Methods: A retrospective observational study was conducted including 599 older (≥65 years) patients with hip fracture admitted to the Orthogeriatric Unit of University Hospital of Trieste, Italy from January 1st to December 31st 2017. Sociodemographic, clinical, functional and biochemical data were collected. Serum osmolarity was calculated using a validated equation. Patients with calculated osmolarity >300 mmol/L were considered dehydrated (HD). eGFR was calculated by a standard formula. Severity of frailty was scored according to the Multidimensional Prognostic Index (MPI), an assessment tool including information on functional, nutritional, cognitive and social status, polypharmacy and comorbidities.

Results. The prevalence of preoperative HD was 20.4% (n=122). Among patients on diuretics, the most frequently prescribed medications were furosemide (n=127, 66.8%)—alone (n=92, 72.4%) or in association (spironolactone: 27, 21.3%; other diuretics: 8, 6.3%), and hydrochlorothiazide (alone: 48, 25.3%; with amiloride: 10, 5.3%).
Among comorbidities, preoperative HD was significantly ($p<0.05$) associated to chronic heart failure, chronic kidney failure, diabetes, and arterial hypertension.
No statistically significant difference between-MPI severity groups was found in HD prevalence in the preoperative phase.

Conclusions. HD is common in older patients acutely admitted for hip fracture and associated with comorbidities and diuretic therapy. Given its detrimental effects on clinical outcomes a careful assessment should be performed in this class of patients