

P22. THE FREQUENCY AND PATHOGENY OF RENAL DISEASE IN MALIGNANT HEMOPATHIES

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Aim/Objectives: Research of the prevalence of renal impairment in patients with hematologic malignancies, identifying the main pathogenic mechanisms, assess the impact of renal impairment on the evolution and prognosis of the malignant hemopathy.

Material and method: We analyzed the results of evaluation of the renal function in a group represented of 424 subjects diagnosed with hematologic malignancies in our clinic between 2008-2014: 231(55,8%) males and 183 (44,2%) females, aged between 33 si 92 years, mean age 65,3 years.

We investigated:

<the frequency of renal impairment in patients with cu Multiple Myeloma (MM) (80 subjects), Non-Hodgkin Lymphoma (NHL) (140 subjects), Acute Leukemia (AL) (17 subjects), Myeloproliferative Neoplasms (MPN): Chronic Myeloid Leukemia (CML) (22 subjects), Essential Thrombocythemia (ET) (30 subjects), Primary myelofibrosis (PMF) and Polycythemia vera (PV) (28 subjects), Myelodysplastic Syndromes (MDS) (15 subjects), Chronic Lymphocytic Leukemia (CLL) and Hairy Cell Leukemia (HCL) (62 subjects), Hodgkin Lymphoma (HL) (20 subjects).

<the type of renal impairment: tubular nephropathy (TN), glomerular nephropathy (GN), kidney malignant invasion, compression of the urinary tract and kidney vessels.

The impact of renal impairment on the evolution, treatment and prognosis of the malignant disease.

Results: The frequency of the renal impairment in the 414 patients was: 29,47% (122 subjects); the highest frequency was identified in the patients with MM: 48,75% (39 subjects), followed by AL: 47% (8 subjects), MPN (PV, MMM): 35,71%, ET: 26,66% (8 subjects) and MDS: 26,66% (4 subjects), HL: 25% (5 subjects), CLL: 22,58% (14 subjects), NHL: 22,14% (31 subjects), CML: 13,6% (3 subjects).

Of the 122 of patients with renal impairment, NT were found in 68% of subjects (83), NG in 23% of subjects (28), complex mechanisms (kidney localization of the disease, renal vein thrombosis, compression/urinary tract invasion) in 9% of subjects (11). TN had the highest frequency in patients with MM: 41.25% (33 of the 80 subjects with MM) and NG had high frequency in subjects with BH: 15% (3 out of 20 subjects) and in subjects with NHL: 7.1% (10 of 140 subjects.) The main etiopathogenic mechanisms identified were hyperuricemia 42.6% of subjects (52 of 122), hypercalcemia in 16.39% of subjects (20), serum concentration and urinary lambda light chains (present in 60% of subjects with MM and NT)) and kappa (present in 40% of subjects with MM and NT), recurrent infections in 14.1% of subjects (17), autoimmune induced phenomena in 6.5% of subjects (8), cryoglobulinemia in 1.64% of subjects (2), recurrent urinary tract infections, antibiotic therapy and proapoptotic tumor lysis syndrome in 3.2% of subjects (4), tumoral invasion in 1.64% of subjects (2), compression of the urinary tract and renal vessels 7.37% of the subjects (9).

Conclusions : Renal impairment in malignant haemopathies has a significant frequency of 29.47%. Etiopathogenic mechanisms are the major metabolic abnormalities: hyperuricemia, hypercalcemia, tumor lysis syndrome, the presence of pathological immunoglobulin, autoimmune mechanisms, and infections, complications of the anti-infection therapy, chemotherapy, tumoral involvement of the kidney, compression/invasion of the urinary tract and renal vessels. Also we note the pathology associated with diabetes mellitus, cardiovascular disease and a mean age of 65 of the subjects monitored.

Biological weakening the patient with underlying comorbid chronic kidney disease, medication used, dose adjusted chemotherapy, antibiotics antibacterial / antifungal / antiviral have an adverse effect on prognosis of the haematologic disease. This context requires immediate correction of all potentially aggressive mechanisms on renal function.