**HYPOMAGNESAEMIA IN CARDIO-CEREVROVASCULAR DISEASE IS LINKED OF SOME RISK FACTORS OF ATHEROSCLEROSIS AND OF MISSING TOOTH, IN PATIENTS FROM ROMANIA**

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Purpose: Hypomagnesaemia (HMg) is implied in pathogenesis of atherosclerosis mainly by: activation of leukocytes and macrophages, freeing of cytokines and oxidation of LDL. We analyzed the links between HMg and some atherosclerosis risk factors (RF): dyslipidaemia, overweight, arterial hypertension etc, and dental state appreciated by missing tooth (MT) (a consequence of chronic gums inflammation by parodontosis, parodontitis), in patients with cardio-cerebrovascular disease (CCVD) from Romania.

Methods: In a cross-sectional study were analyzed 479 patients with CCVD: old myocardial infarction 120(25%), angina pectoris 235(49%.), ischemic cardiomyopathy 32(7%), stroke 72(15%), peripheral arterial disease 20(4%). Mean age was 58+/-11 years, 274(57%) were women. Mean serum Mg level was 2,12+/-0,37mg% (low level first tertile <=1,7 mg%).

Results: Testing difference of all RF between first and last tertile of serum Mg (sMg), we found statistic signification for: age (60,5+/-11,6 vs 56.9+/-11.9 years, P<0,012), serum glucose (121,5+/-53,6 vs 101,4+/-28,4mg, P<0,0002), body height (164.1+/-9.8 vs 167.9+/-8.1cm, P<0.0007), body weight (75,6+/-17,6 vs 83.2,1+/-16,9kg, P<0,005), serum creatinine (0,95+/-0,26 vs 0,86+/-0,24mg, P<0,004), and serum fibrinogen (414.3+/-127.1 vs 378.0+/-112.1mg, P<0.014). Other RF do not differ in relation with Mg level. Concerning dental state we found that MT (16,2+/-10,9 vs 12,1+/-9,1, P<0,001).

Conclusions: Our data show that HMg is found frequently in patients with specific features such as: more aged, with reduced body dimensions (height and weight) with more MT and with increased serum fibrinogen (as inflammation marker). These aspects may be linked of atherogenesis mechanisms soliciting more careful in interpretation of sMg levels in BCCV. Some therapeutic consequences are discussed.