Correlations between complement C3 and long term outcome of patients diagnosed with renovascular hypertension, complicated with left ventricle systolic dysfunction

Paloma Manea
Grigore T. Popa University of Medicine and Pharmacy, Romania

The study monitored 42 patients with renovascular hypertension, due to renal artery stenosis, followed for 24 months. The patients were divided in 2 groups: Group A with systolic dysfunction and group B without systolic dysfunction. Clinical approach and laboratory parameters (serum creatinine, creatinine clearance, transaminases, serum electrolytes, glycemia, lipid profile, complete blood count, brain natriuretic peptide-BNP, high sensitivity C reactive protein, microalbuminuria, complement C3, electrocardiogram, transthoracic echocardiogram, renal artery sonogram) were performed every 6 months. The statistical analysis revealed a strong correlation between low levels of complement C3 and severe systolic dysfunction ($r=0.826$ and $p=0.02$). Previous studies noticed the implication of complement C3 in renal ischemia, especially in animal models but it seems that this C3 fraction is also connected with the severity of systolic dysfunction, in chronic renal ischemia. This observation will open new perspectives for establishing a long term prognosis of renovascular hypertension, complicated by systolic heart failure; also, it will offer us a better understanding of this disease for improving therapeutic strategy.

Biography
Paloma Manea is a Specialist in Cardiology and Internal Medicine, competence in echocardiography and Lecturer at Grigore T. Popa University of Medicine and Pharmacy, Iasi, Romania. In 2013, she discovered the 6th case (there are only 5 communicated cases, worldwide) of spontaneous closure of an interventricular septal defect after a myocardial infarction. She has published and communicated 80 scientific works. Her main research areas are related to angiotensin-renin-aldosterone system, skin cancer, correlations between dentistry and medical diseases and geriatric pathology.

maneacpaloma@yahoo.com