Heart

5.5 Prevalence and Correlates of Multiple Organ Damage in Treated Hypertensives: Results From the ETODH Study

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Introduction. We investigated the cluster of cardiac, vascular and renal damages in a large sample of treated hypertensive patients in order to assess the value of a systematic search for organ damage (OD) during antihypertensive treatment.

Methods. A total of 2213 treated essential hypertensive patients included in the Evaluation of Target Organ Damage in Hypertension (ETODH), an observational registry of hypertension-related OD, were considered for this analysis. All patients underwent extensive investigations searching for left ventricular hypertrophy (LVH) or LV concentric remodelling (cardiac OD), carotid plaques and/or intima-media thickening (vascular OD) and microalbuminuria (MA) and/or increased serum creatinine (renal OD).

Results. In the whole population the most common OD was LVH (46.5%) followed by carotid plaque (44.1%), carotid IM thickening (28.8%), MA (19.1%), LV concentric remodelling (10.4%) and increased serum creatinine (3.1%). Over all, the involvement of a single organ was observed in a limited fraction of patients, ranging from 23% for MA to 51% for carotid plaque. Prevalence rates of patients negative for OD (group I) or positive for one (group II), two (group III), or three (group IV) markers of OD were the following: 17.2 %, 36.4%, 33.9 % and 12.5 %, respectively.

Conclusions. Our findings show that a cluster of two or three OD is the prevalent cardiovascular phenotype in treated hypertensive patients referred to a specialist centre. These findings call for an extensive evaluation of cardiac and extracardiac OD in all patients attending a specialist setting.