[PP.14.395] COULD BNP IDENTIFY DIABETIC HYPERTENSIVES WITH LEFT VENTRICULAR SYSTOLIC–DIASTOLIC DYSFUNCTION, EARLY MANIFESTATION OF CARDIOMYOPATHY? REVERSAL BY ANGIOTENSIN II RECEPTOR BLOCKADE

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To identify the clinical-functional effects of angiotensin II receptor blockade telmisartan (T) on diastolic function (DF), mitral regurgitation (MR) variations and plasma BNP level (l) we studied 50P, aged 55 ± 5y, divided into 2 groups: 30 treated with T for 6 months (m), and 20 without T, control group (wT). P were assessed before and after T during a 6 m. P were grouped into those with normal (N) LVF, systolic dysfunction (SD) only, DD only and both systolic and diastolic dysfunction (SDD). After 6 m with T, LVEF had increased from 24% ± 7% to 29% ± 9% ($p < 0.0001$);this change (C) was caused by a reduction in end-systolic volume index ($p < 0.0001$). Deceleration time (dt) of early diastolic filling (Df) increased (134 ± 74 ms vs. 196 ± 63 ms; $p < 0.0001$). 17 of the 28P with demonstrated improvement of LVDF moved from having a restrictive filling pattern (fP) to having a N or pseudo N LVfP. In the wT, no significant (ns) C in dt of early Df were found (139 ± 74 ms vs. 132 ± 45 ms; P = ns). The regurgitant orifice area decreased significantly with T but not wT. These C were associated with a significant reduction of MR stroke volume (SV) with T ($p < 0.0001$) but not wT (P = ns). These C of MRSV were closely associated with significant improvement of forward aortic SV ($r = -0.57$, $p < 0.0001$). These findings were not observed in P wT. The M E/A ratio increased from 0.65 ± 0.11 to 0.75 ± 0.19 following T. BNP was 416 ± 413 pg/ml in the 28 P diagnosed with abnormal LVF, compared with 30 ± 36 pg/ml in the 20 P with NLVF. 2 P with both SDD had the highest l (675 ± 423 pg/ml). BNP were unable to differentiate S vs. DD. In P with symptoms of HF and NSF, BNP >57 pg/ml had a positive predictive value of 100% for D

abnormalities. The BNP slightly decreased following T without statistical significance. The C in LV chamber stiffness did not correlate with the C in BNP (r = 0.08, p = ns), T improves DD in P. BNP can reliably predict the presence or absence of LVD on echocardiogram.

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