proved utilization of drugs. AD program implementation included individual or group meetings between the academic detailer and providers, distribution of promotional materials, provider profiling and lectures. Impact was measured by assessing both changes in patterns of medication use as well as comparison to all other US VA healthcare facilities at the follow up period to evaluate whether the changes noted were part of the VA national trend. For analysis purposes, we used treatment day equivalents derived from a national pharmacy database for each of 4 major classes of antihypertensive medications. At baseline (March - August 1998) 7.7 million treatment days of medication were dispensed. This comprised 13.8%, 22.8%, 35.8% and 27.5% of thiazide (THI), beta blocker (BB), ACE inhibitors or angiotension receptor blockers (ACE/ARB) and calcium antagonist (CA) treatment days, respectively. During the follow up period after the AD intervention (March - August 1999), 9 million treatment days were dispensed reflecting growth in the treated population. The proportions were now 15.1% THI, 24.5% BB, 36.2% ACE/ARB and 24.2% CA (p<0.01 for the change in each class). These figures for the same follow up time frame in all other VA healthcare facilities were 12.9% THI, 21.2% BB, 36.7% ACE/ARB and 29.1% CA use. Evaluation of 351 randomly selected patients’ blood pressure recordings showed an average BP (SD) of 141/0.76.3 (18.2/11.9) at baseline in comparison to 139.7/76.0 (19.2/12.3) at follow up (p values 0.27 systolic, 0.30 diastolic). We conclude that the AD program to improve use of hypertensive medications resulted in greater THI and BB use and decreased CA use from baseline to follow up. Our medication use during the follow up period differed from all other VA healthcare facilities. This suggests greater adherence to VA and JNC-VI guidelines. Lastly, changes in medication utilization did not affect the average blood pressure in our treated patient population. Academic detailing as a tool for guideline promotion is a highly effective system to improve hypertension management.

Key Words: Practice Guidelines, Academic Detailing, Provider Profiling

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HEART RATE VARIABILITY: ACE-INHIBITION, ANGIOTENSIN II ANTAGONISM AND THEIR ASSOCIATION IN MILD HYPERTENSION
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Angiotensin II is known to play a central role in the pathophysiology of hypertension. Few data are available about the relation between angiotensin II antagonism and the cardiac autonomic drive.

We aimed at comparing the effects of the administration of ACE-inhibition alone, AT1 blockade alone and their association on the cardiac sympathetic drive in uncomplicated essential hypertension by means of heart rate variability, evaluated both in 24h Holter (FFT method, time and frequency domain indexes) and in short recordings (in supine position and during 60° tilting: autoregressive method, power spectral indexes).

Twenty-one hypertensive patients (aged 42.5±4) were evaluated before and at the end of a three-week period treatment with either trandolapril (2 mg) or irbesartan (300 mg), or the association of trandolapril (0.5 mg) and irbesartan (150 mg). No significant differences in heart rate variability parameters were found between irbesartan and trandolapril when administered alone, although both drugs significantly and equally lowered blood pressure. Despite a similar reduction in blood pressure, the association between the two drugs induced a significant reduction in the cardiac sympathetic tone, as inferred by the reduction in the LF component (see figure).

In uncomplicated essential hypertension, chronic ACE-inhibition and AT1 blockade are not able to influence the cardiac autonomic drive explored by heart rate variability either in the resting position or after a sympathetic challenge. This two compound-classes appear to be equivalent in affecting the cardiac autonomic tone in mild essential hypertension. On the contrary, a sympatholitic effect can be detected at the cardiac level by the chronic concomitant administration of a ACE-inhibitor and AT1 antagonist in the same clinical setting.

Key Words: Angiotensin Antagonism, heart rate variability, sympathovagal balance

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CANRENONE COMPETES FOR THE SAME SITE OF OUABAIN ON NA+/K+-ATPASE
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Recently several studies suggested the existence in human plasma of an endogenous digitalis-like factors (EDLF) similar to ouabain which could

Key Words: canrenone, ouabain, Na+/K+-ATPase