

[P-202E] Antihypertensive medication compliance in a Veterans Administration health care system

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Noncompliance with antihypertensive treatment may result in failure to achieve optimal blood pressure reduction. The primary objective of our study was to quantify and compare compliance rates associated with various classes of antihypertensives in a Veterans Administration health system. Medication classes evaluated were angiotensin II receptor blockers (ARB), angiotensin converting enzyme inhibitors (ACEI), alpha 2 agonists (A2A), beta blockers (BB), calcium channel blockers (CCB), and diuretics (D). Medication profile data for the targeted classes of antihypertensives were extracted from a computerized prescription and refill database. Prescription records for Veterans having at least one prescription refilled during the calendar year 1998 were evaluated. Compliance rates were calculated using previously described methods (treatment days divided by days supplied multiplied by 100). A compliance rate was determined for each unique prescription, and a mean rate was calculated for each class. Between class compliance rate comparisons were performed using a one-way ANOVA with Tukey's pair-wise comparisons. A total of 26,000 prescriptions were included in the analysis. Calculated compliance rates for the ARB, CCB, ACEI, BB, D, and A2A classes were 97.2%, 95.3%, 94.6%, 92.8%, 92.7%, and 90.7%, respectively. Compliance rates were significantly higher with ARBs compared to A2As ($p < 0.001$); CCBs compared to BBs, Ds, and A2As ($p < 0.001$); and ACEIs compared to BBs, Ds, and A2As ($p < 0.001$). Knowledge of the relative compliance rates associated with various classes of antihypertensives can be used along with clinical practice guidelines to optimize medical therapy in this population.