**HOW IMPORTANT IS WHITE-COAT HYPERTENSION FOR THE APPROPRIATE TREATMENT OF HIGH-RISK PATIENTS WITH ISOLATED SYSTOLIC HYPERTENSION?**

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The significance of white-coat hypertension (WCH) in older persons with isolated systolic hypertension (ISH) remains poorly understood. Older subjects with ISH from the population based 11-country IDACO database who had daytime ambulatory blood pressure (ABP) and conventional BP (CBP) measurements were analyzed for cardiovascular risk. The present analysis totaled 7295 persons—of whom 1593 had ISH. During a median follow-up of 10.6 years, there were a total of 655 fatal and non-fatal cardiovascular events. The analyses were stratified by treatment status. In untreated subjects, those with WCH (CBP =or>140/<90 mmHg and ABP <135/<85 mmHg) and subjects with normal BP (CBP <140/<90 mmHg and ABP <135/<85 mmHg) were at similar risk (adjusted hazard rate 1.17; 95% confidence interval 0.87-1.57, P=0.29). In contrast, the hazard rate for untreated ISH with WCH, as compared to untreated normotension, was 2.68 (CI: 1.10 to 6.54, P=0.03) in the presence of diabetes and 1.03 (CI: 0.72 to 1.47, P=0.88) in absence of diabetes. Furthermore, both treated ISH subjects with WCH (2.00; 1.43-2.79; P<0.0001) and treated subjects with normal BP (2.00; 1.58-2.54; P<0.0001) were at higher risk as compared to untreated normotensive subjects.

In conclusion, individuals with WCH, either untreated or treated, can have cardiovascular risk equal to or greater than their normotensive comparator groups. Indeed, untreated diabetic ISH subjects with WCH may present with greater cardiovascular risk than their normotensive comparator group. Therefore, one should be cautious in applying the term WCH to persons with ISH receiving antihypertensive treatment or in the presence of diabetes.