Ambulatory prescribing of renin-angiotensin-aldosterone system (RAAS) blocking drugs in Saxony

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Background: Blockade of the RAAS plays a pivotal role in the management of arterial hypertension, congestive heart failure, post myocardial infarction and nephropathy with albuminuria, especially in diabetic patients. However, so far little is known about the physicians' prescription preferences of RAAS blocking drugs in Germany on a regional level.

Aim and methods: We assessed the prescription patterns of ACE-Is and ARBs in the federal state of Saxony, Germany, using the database of the largest health insurance service (AOK Krankenkasse) in Saxony for the years 2003 and 2004. Prescriptions for all insured individuals who received either an angiotensin converting enzyme inhibitor (ACE-I), or an angiotensin receptor blocker (ARB) were analyzed. Data were evaluated quarterly and an average was calculated for each calendar year.

Results: In 2003, 74.6% of all patients, treated with a RAAS blocking agent (ACE-I or ARB), were administered an ACE-I, 23.1% an ARB and 2.3% received double blockade of the RAAS with an ACE-I and an ARB. In 2004, 72.6% of patients received an ACE-I, 25.1% received an ARB and 2.3% were on ACE-I-ARB-combination treatment. Of all ACE-I prescriptions, captopril (23.1%), enalapril (21.9%) and lisinopril (19.7%) were the most frequently used drugs in 2003. Valsartan (27.3%), candesartan (24.2%) and losartan (18.5%) were the most prescribed ARBs in 2003. In 2004, ramipril (24.3%), enalapril (21.5%) and captopril (19.9%) were the most commonly used ACE-Is. The pattern of ARB prescriptions in 2004 was similar to the previous year: valsartan (27.0%), candesartan (24.1%), losartan (15.3%). Much less RAAS blocking agents were prescribed in the first quarter of each year than in fourth quarter, which is probably due to economic reasons.

Conclusion: ACE-Is were prescribed approx. 3 times more often than ARBs. ACE-I – ARB combination treatment was uncommonly administered which is in line with limited evidence of benefit from double RAAS inhibition.