An economic evaluation of atenolol vs. captopril in patients with Type 2 diabetes (UKPDS 54).

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AIMS: To compare the net cost of a tight blood pressure control policy with an angiotensin converting enzyme inhibitor (captopril) or beta blocker (atenolol) in patients with Type 2 diabetes. DESIGN: A cost–effectiveness analysis based on outcomes and resources used in a randomized controlled trial and assumptions regarding the use of these therapies in a general practice setting. SETTING: Twenty United Kingdom Prospective Diabetes Study Hospital–based clinics in England, Scotland and Northern Ireland. SUBJECTS: Hypertensive patients (n = 758) with Type 2 diabetes (mean age 56 years, mean blood pressure 159/94 mmHg), 400 of whom were allocated to the angiotensin converting enzyme inhibitor captopril and 358 to the beta blocker atenolol. MAIN OUTCOME MEASURES: Life expectancy and mean cost per patient. RESULTS: There was no statistically significant difference in life expectancy between groups. The cost per patient over the trial period was 6485 UK pounds in the captopril group, compared with 5550 UK pounds in the atenolol group, an average cost difference of 935 UK pounds (95% confidence interval 188 UK pounds, 1682 UK pounds). This 14% reduction arose partly because of lower drug prices, and also because of significantly fewer and shorter hospitalizations in the atenolol group, and despite higher antidiabetic drug costs in the atenolol group. CONCLUSIONS: Treatment of hypertensive patients with Type 2 diabetes using atenolol or captopril was equally effective. However, total costs were significantly lower in the atenolol group. Diabet. Med. 18, 438–444 (2001)