

Hypertension in Diabetes Study III
Prospective Study of Therapy of Hypertension in Type 2 Diabetic Patients:
Efficacy of ACE Inhibition and β -Blockade

Hypertension in Diabetes Study Group

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The Hypertension in Diabetes Study (HDS) is an ongoing multicentre, prospective randomized intervention trial of therapy of hypertension (≥ 160 and/or ≥ 90 mmHg) in Type 2 diabetic patients. It compares tight blood pressure control (aim: $< 150/85$ mmHg) versus less tight control (aim: $< 180/105$ mmHg) and, within the tight control group, an ACE inhibitor, captopril, versus a beta blocker, atenolol. We report the efficacy, side-effects of treatment, biochemical responses and incidence of hypoglycaemia in 755 patients (mean age 57 years, blood pressure 150/94 mmHg) followed for 2 years. At 2 years, blood pressure was 143/84 in the tight control and 156/94 mmHg in the less tight control group ($p < 0.0001$). Blood pressure reduction, adherence to therapy, incidence of side-effects and of hypoglycaemia were similar on captopril and on atenolol. Patients on atenolol had a greater increase in body weight (+ 2.3 vs + 0.7 kg, $p < 0.01$) and a non-significant trend to a greater increase in triglyceride than patients on captopril. A large blood pressure difference between the tight control and less tight control groups was obtained, with captopril and atenolol having similar hypotensive effects. The study has the potential to determine whether strict blood pressure control reduces the incidence of diabetic complications and whether ACE inhibitor or β -blocker therapy is clinically advantageous.