Long-term treatment with pioglitazone reduces insulin resistance and prevents progression of atherosclerosis and coronary heart disease.

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- Pioglitazone (a thiazolidinedione) is capable of triggering the peroxisome proliferator-activated receptors (PPAR-γ) which regulates carbohydrate and lipid metabolism, immune and inflammatory responses in heart tissues.
- In a study in patients with coronary artery disease (CAD), adding pioglitazone (15 mg, once-daily) to standard therapy resulted in:
 - Reduction of systolic and diastolic BP
 - Decrease in the duration and frequency of angina attacks
 - \circ $\;$ Regression of atherosclerosis of the carotid vessels $\;$
 - Decrease in markers of insulin resistance
 - Decrease in total cholesterol and low density lipoprotein (LDL-C), and an increase in high-density lipoprotein (HDL-C).

Long-term treatment with pioglitazone at low doses against the background of standard therapy promotes the prevention of atherosclerosis and reduction of insulin resistance.