Metformin Monotherapy Significantly Decreases Epicardial Adipose Tissue Thickness in Newly Diagnosed Type 2 Diabetes (T2D) Patients.

Ziyrek M, et al. Rev Port Cardiol. 2019 Jul. pii: S0870-2551(18)30164-1.

- Imbalance between pro- and anti-inflammatory cytokines secreted from visceral adipose tissue (VAT) contributes to the pathogenesis of certain cardiovascular and metabolic disorders, including insulin resistance.
- Epicardial adipose tissue (EAT) is a form of VAT mainly concentrated along the coronary arteries - EAT thickness is positively correlated with cardiovascular disease.
- After 3 months of metformin monotherapy, there was a significant decrease in EAT thickness (5.07±1.33 mm vs. 4.76±1.32 mm; p<0.001).
- BMI was also significantly decreased from 28.27±2.71 to 27.29±2.10.

Metformin Monotherapy significantly decreases EAT thickness and BMI in T2D patients. This suggests that metformin could reduce the frequency of coronary atherosclerosis.