

OXIDATIVE STRESS MARKERS IN TYPE 2 DIABETIC WOMEN.

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Introduction: In conditions of hyperglycemia, reactive oxygen species are generated. These reactive species provoke vascular changes in diabetes mellitus. However, the evidence is insufficient to include oxidative stress markers in clinical evaluation studies, particularly in women.

Objective: In this work, we analyzed oxidative stress markers in type 2 diabetics.

Methods: In 108 type 2 diabetic patients, blood glucose, glycated hemoglobin, creatinine, lipid profile, urinary albumin excretion, thiobarbituric acid reactive products (TBARS), protein oxidation and extracellular superoxide dismutase and catalase activity were quantified. The data were stratified according to vascular risk conditions. All participants provided written informed consent and the study protocol was approved by the Institutional Ethics Committee.

Results: There was a positive association between TBARS and the time of evolution of the disease and negative with HDLc. Superoxide dismutase activity and protein oxidation were higher in hypertensive diabetic women (13.97 vs 6.6 U / mL, 2.60 vs 2.04 nmol / mg of protein, respectively).

Conclusions. The oxidative damage to lipids and proteins is consistent with the time of evolution of the disease and the presence of arterial hypertension.

Key words: type 2 diabetes mellitus, women