

Glucose effect in the expression of endothelial lipase in human endothelial cells and in patients with diabetes mellitus type 2 Efecto de glucosa en la expresión de lipasa endotelial en células endoteliales humanas y en sujetos con diabetes mellitus tipo 2

Pierart, C.

Serrano, V.

Rubio, L.

Ebensperger, R.

Foncea, R.

Introduction: Endothelial Lipase (EL), enzyme that modulates HDL metabolism, is overregulated by inflammatory-cytokines. Type 2 Diabetes (DM2) has been associated with a subclinical inflammation, so it has been ruled that these patients could have high levels of EL. The objectives of the research are to determine the effect of glucose in the expression of EL in culturing cells and evaluate the relation between the levels of EL and the metabolic control in patients with DM2. Method: During 24 hours, human endothelial cells (HUVEC) were stimulated with different concentrations of glucose (5.5, 25 and 50 mmol/L), the effect was evaluated over the expression of EL. In DM2 patients levels of EL, glucose and HbA1c were measured. We had a control group (8) to determine the levels of enzyme. EL was measured by immune transference, and the results were expressed by arbitrary units (AU). Results: In HUVEC cells, the expression of EL was directly proportional extracellular glucose ($p < 0.05$). 24 diabetic patients w