COMPARATIVE STUDY OF THE LIPOPROTEIN ELECTROPHORETIC PROFILE IN DIABETIC AND NON-DIABETIC PATIENTS WITH CONGENITAL GENERALIZED LIPODYSTROPHY

Santos, MGN; Baracho, MFP; Brito, CRN; Bezerra, CM; Brandão-Neto, J; Medeiros, TMD.

UNIVERSIDADE FEDERAL DO RIO GRANDE DO NORTE

Congenital generalized lipodystrophy (CGL) or Seip-Berardinelli syndrome is a rare metabolic disorder with systemic repercussions, characterized mainly by alterations in subcutaneous adipose tissue distribution, severe insulin resistance and intense hypertriglyceridemia. Plasma lipoproteins are associated forms of lipids and proteins consisting of macromolecular aggregates that are important for transporting triglycerides, phospholipids and cholesterol. Given that these factors favor the manifestation of cardiovascular diseases, mainly in diabetic patients, the present study investigated the intensity of lipoprotein alterations in patients with lipodystrophy, in order to provide therapy that improves their quality of life. The study was carried out with 21 patients of both sexes in the 2 to 40-year age group (10 non-diabetic and 11 diabetic). Lipoproteins were analyzed for cellulose-acetate electrophoresis and alkaline pH. The results showed much-reduced alpha-lipoprotein levels and elevated beta-lipoprotein, mainly in patients with diabetes mellitus. We therefore conclude that, besides the complications inherent to diabetes, lipodystrophic individuals are at greater risk of developing cardiovascular diseases.

Keywords: lipodystrophy, diabetes, dyslipoproteinemia