Abstract

Background: Lipodystrophy is a frequent disorder among patients with human immunodeficiency virus (HIV) infection, characterized by a loss of adipose tissue from the extremities, gluteal region and face, with excess fat in the neck and abdominal region. Metabolic abnormalities such as hyperlipidaemia and diabetes mellitus frequently coexist, posing these patients to an increased cardiovascular risk. Drug therapy may improve some of these metabolic disturbances, but to date there are no treatments for lipodystrophy with proven benefit. Case report: A 42 year old man with HIV lipodystrophy was started on a standard low caloric diet with < 30% of total fat and < 10% of saturated fat, together with rosiglitazone 8 mg daily. After five months of treatment, given that lipodystrophic features and dyslipidaemia were still present in our patient, we tried to further improve therapeutic results by eucaloric substitution of medium chain triglycerides for dietary long chain fatty acids. Three months later, a dramatic change in body composition was shown with an increase in lean mass and a decrease in fat mass, together with an improvement in lipid profile. Conclusion: Eucaloric substitution of medium chain triglycerides for dietary long chain fatty acids may produce therapeutic benefits in HIV lipodystrophy.

Keywords
HIV, Lipodystrophy, Medium chain triglycerides, Body composition, Dyslipidemia, Rosiglitazone.