Evaluation of the Glucosylceramide Content by HPTLC in the Plasma of Patients with Gaucher Disease.

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Gaucher´s Disease (GD) is a sphingolipidose that leads to an accumulation of glucosylceramide (GluCer). The objective of this study was to standardize a methodology capable of being utilized in clinical research laboratories and which is based on the extraction and purification of glucosylceramide from the blood plasma. The glucosylceramide isolated by high resolution thin layer chromatography (HPTLC) was processed chemically and the respective band confirmed by imunoprocessing. Quantification by densitometry demonstrated that GD patients had about seventeen times more GluCer than normal individuals, and seven times more than patients on ERT. From the results obtained the methodology established can be used for complementary diagnosis and to monitoring the treatment of GD patients.

Keywords: Gaucher´s Disease; Glucosylceramide; Blood plasma analysis; HPTLC

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