Nicotinic acid increases cellular transport of high density lipoprotein cholesterol in patients with hypoalphalipoproteinemia El ácido nicotínico aumenta el transporte celular de colesterol de las lipoproteínas de alta densidad en pacientes con hipoalfali

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Background: Plasma high density lipoproteins (HDL) are involved in reverse cholesterol transport mediated by the scavenger receptor class B type I (SR-BI). Nicotinic acid increases HDL cholesterol levels, even though its specific impact on SR-BI dependent-cellular cholesterol transport remains unknown. Aim: To determine the effect of nicotinic acid on HDL particle functionality in cholesterol efflux and uptake mediated by SR-BI in cultured cells in hypoalphalipoproteinemic patients. Material and Methods: In a pilot study, eight patients with low HDL (? 40 mg/dL) were treated with extended release nicotinic acid. HDL cholesterol and phospholipid levels, HDL2 and HDL3 fractions and HDL particle sizes were measured at baseline and post-therapy. Before and after nicotinic acid treatment, HDL particles were used for cholesterol transport studies in cells transfected with SR-BI. Results: Nicotinic acid treatment raised total HDL choles