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P-105 - Improvement of the advanced lipoprotein profile in subjects with new-onset type 2 diabetes mellitus after glucose optimization

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Resumen

Objectives: The impact of glycemic optimization on lipoprotein subfraction parameters in dyslipidemic subjects with new-onset type 2 diabetes mellitus (T2D) was examined.

Material and methods: We evaluated the serum lipid and advanced lipoprotein profiles in twenty-one subjects at onset of T2D by laboratory methods and 1H-NMR spectroscopy shortly after diabetes diagnosis (baseline), and after achieving optimal glycemic control ($HbA_{1c} \leq 7.0\%$).

Results: Lipoprotein analysis revealed a significant reduction from baseline in predictive ratios of cardiovascular risk (Total cholesterol/HDL-C: -15%; LDL-C/HDL-C: -23% and VLDL-C + LDL-C/HDL-C: -18%; $p < 0.05$). Mainly attributed to increased HDL (9%) concentration and a concomitant increment of small-size HDL (15%). Notably, related surrogates of atherogenicity were resolved upon achievement of optimal glycemic status.

Conclusions: Our data showed that the optimization of glucose after T2D onset improved HDL levels and that are related to lower cardiovascular risk.