DYSLIPIDEMIA IN DIABETES: NEW THERAPEUTIC INSIGHTS USING OLD TOOLS

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Aggressive LDL-lowering in both diabetic and nondiabetic populations has significantly improved clinical outcomes, but residual cardiovascular risk (CV) persists. For decades, the results of many clinical trials with the various statin drugs and more recently with PCSK9 inhibitors targeted to lower LDL have dominated the preventive cardiology literature. In their on-going search for other therapeutic targets, pharma has failed to acknowledge that each apoB-containing lipoprotein density fraction isolated by conventional ultracentrifugation is heterogeneous and contains several immunochemically distinct families that vary in their apoprotein composition and potential atherogenicity. One of these LpB:C is relevant to patients with diabetes since it is atherogenic, present as small dense LDL (sdLDL), abnormally increased in both T1D and T2D patients with TG levels >200 mg/dl, and generated during the lipolysis and remodeling of lipoproteins in plasma by cholesteryl ester (CE) transfer protein (CETP). Since the activity of CETP (CET) is increased in both T1D and T2D and promotes the formation of CE-enriched atherogenic lipoprotein particles, reducing CET should be a therapeutic goal. Simply blocking CETP with the cetrapib drugs to raise HDL (another pharma target) has been shown in a series of disappointing clinical trials to be a bad idea. CET can be normalized safely with two time-tested therapies (marine lipids, probucol) in generic formulations – interventions that decrease formation of sdLDL and are likely to reduce residual CV risk in statin-treated diabetic patients.

Biography

John D Bagdade has completed his Medical degree from Cornell Univ. Medical College, and clinical training at Boston City Hospital and the University of Washington in Seattle (UW). He has acquired his research experience in the laboratory of Dr. E L Bierman at UW where he attained the rank of Professor before relocating to Chicago to head the endocrine section for ten years at Rush University. Later, he has served as the Director of research at the Phoenix, AZ VA Medical Center. He has authored more than 140 peer-reviewed publications. His research has been supported by the NIH, ADA, and JDRF.

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