Editorial: Secondary Dyslipidemias

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INTRODUCTION

The term "secondary dyslipidemias" is used to describe the quantitative and/or qualitative alterations in lipoprotein metabolism that complicate the course of other medical disorders. Although the precise prevalence of secondary dyslipidemias has not been determined, the increasing incidence of the conditions that predispose to their development (such as obesity, diabetes mellitus, malignancies, end stage renal disease etc) implies that these alterations are very common in the every day clinical practice. Several lines of evidence suggest that the identification and appropriate management of secondary dyslipidemias is of paramount importance. Like primary dyslipidemias, the secondary changes in lipid metabolism significantly increase the risk for cardiovascular events [1, 2] as well as for other disease-specific complications. For example, the dyslipidemia of chronic kidney diseases may accelerate the deterioration of renal function in patients with renal failure [3], whereas diabetic dyslipidemia may increase the risk of acute pancreatitis in genetically predisposed individuals [4]. On the other hand, since the improvement of the underlying disease (if possible) usually results in the correction (at least in part) of lipid abnormalities, the proper identification of a secondary cause of dyslipidemia may help to the avoidance of unnecessary hypolipidemic treatment. In addition, some secondary causes of dyslipidemia (such as hypothyroidism and renal failure) may increase the risk of serious and potentially fatal adverse events after hypolipidemic drug administration [5, 6], thus their exclusion is obligatory prior to the institution of lipid-lowering therapy. Finally, the presence of dyslipidemia or its response to the conventional medical treatment may represent the first clinical sigh of an important underlying medical condition [7].

The most common causes of secondary dyslipidemias as well as the few simple laboratory tests that along with a detailed medical history and a throughout physical examination are needed for their exclusion are presented in the Table **1**. This supplement issue of the Open Cardiovascular Medicine Journal is dedicated to the most common forms of secondary dyslipidemias. The pathophysiology, clinical features and the relevant therapeutic options are discussed extensively. We believe that this knowledge is of importance not only for lipid specialists but also for every doctor that deals with dyslipidemic individuals in the primary care setting.

Table 1. Common Causes of Secondary Dyslipidemias and Their Laboratory Markers

Condition	Laboratory test
Diabetes mellitus	Fasting glucose
Hypothyroidism	Thyroid stimulating hormone (TSH)
Chronic kidney disease	Serum creatinine Estimated Glomerular filtration rate (eGFR)
Nephrotic syndrome	Dipstick urine examination
Cholestasis	Alkaline phosphatase

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