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Adherence to lipid-lowering therapy

To the Editor

Elevated low-density lipoprotein cholesterol (LDL-C) represents a causal risk factor for the development of atherosclerotic cardiovascular disease (ASCVD). Nevertheless, the results of the EUROASPIRE (European Action on Secondary and Primary Prevention by Intervention to Reduce Events) program showed unsatisfactory control of major CV risk factors, including poor control of lipid disorders in the primary prevention setting [1–6]. The same phenomenon has been observed in patients with acute coronary syndrome [7, 8, 9]. Adherence and persistence to the prescribed lipid-lowering treatment (LLT) are key drivers for achieving therapeutic goals and improving clinical outcomes. In the German population of patients who had been newly prescribed statin (n = 865,732), ezetimibe (n = 34,490), or PCSK9 inhibitor (n = 1940), 71%, 72.9%, and 55%, respectively, discontinued their prescribed LLT by the 300-day time point [10]. In the Polish cohort of 1499 patients after acute myocardial infarction (AMI) only 20.4% of patients achieved the LDL-C target of < 55 mg/dL (< 1.4 mmol/L), and 26.9% of patients achieved at least a 50% reduction in LDL-C level one year after AMI [11]. In the other study, in patients after AMI, the reported one-year adherence level was 64.4 ± 32.1% and persistence was 72,1% for statins [7].

Recently, Atara et al. [12] summarized approaches aimed at achieving the unachievable, i.e. how to optimize LLT in people who survived acute myocardial infarction. They highlighted the value of LLT optimizing programs including prescriptions of the highest tolerated dosages of high-intensity statins together with ezetimibe, systematic patient adherence, addressing patient scepticism such as general disbelief in medications or a mindset expecting side effects irrespective of the type of medication (e.g., the nocebo phenomenon), comprehensive implementation of lifestyle interventions including both physical activity and dietary measures, and finally a further push to increase prescriptions of PCSK9-inhibitors on top of high-intensity high-dose statins and ezetimibe [12].

Generally agreeing with these suggestions, we believe that it is necessary to test specific solutions enabling the implementation of such defined activities [13–17]. Therefore, we find practically useful a strategy proposed in the MEDMOTION project [18–20]. The project applied in the ELECTRA-SIRIO 2 trial [21, 22] is aimed to support adherence to the study medication. It consists of diagnosis regarding readiness for discharge from hospital [9, 23], adherence to medication [24–26] and functioning in chronic illness [27–31], individualized education [32–34] and motivation [18]. The results of the MEDMOTION project, planned after the completion of the one-year follow-up of 500 patients in the ELECTRA-SIRIO 2 study, are expected soon.

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