Letter to the Editor

Coronary In-Stent Restenosis—Predictors and Treatment

by Dr. med. Helen Ullrich, Maximilian Olschewski, MD, Prof. Dr. med. Thomas Münzel, and Prof. Dr. Tommaso Gori in issue 38/2021

Lipid Metabolism Disorders

As an addition to the extensive review of coronary in-stent restenosis (1) by Hellen Ullrich and co-authors, I would like to point out that lipid metabolism disorders should also be regarded as patient-dependent risk factors. Thus, patients with elevated lipoprotein (a) levels have an increased risk of in-stent restenosis.

Zairis et al. identified lipoprotein (a) as an independent risk parameter for restenosis in a study of 483 patients with coronary stenting (2). Other studies came to similar conclusions (3).

In our center, of the ten patients who are currently undergoing lipid apheresis for lipoprotein (a) metabolic disorders, three have a history with a total of five events of in-stent coronary restenosis.

The occurrence of in-stent restenosis, especially when other risk factors have already been optimized, should prompt an assessment of the lipoprotein (a) metabolism. As in-stent restenosis ultimately corresponds to progression of the cardiovascular disease, lipid apheresis can often be used as a therapy option for these patients.

DOI: 10.3238/arztebl.m2022.0057

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In Reply:

We thank Dr. Marx for his addition to our article (1) and agree with him. Hypercholesterolemia must be considered a risk factor for atherosclerosis, including in-stent neoatherosclerosis, which is a predictor of very late in-stent restenosis (2). We are not aware of a prospective study of the effects of plasmapheresis on the risk of developing in-stent restenosis, but the concept of double filtration plasmapheresis (DFPP) could reduce the concentration of adhesion molecules and thus improve endothelial function. This approach has already been presented (3).

DOI: 10.3238/arztebl.m2022.0058

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Conflict of interest statement:
The authors of the contributions declare that no conflict of interest exists.