PROPROTEIN CONVERTASE SUBTILISIN/KEXINE TYPE 9 INHIBITORS (PCSK9i) OR/AND LIPOPROTEIN APHERESIS (LA)? EXPERIENCE OF THE LARGE EUROPEAN LIPIDOLOGY CENTER

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Introduction: Lipoprotein apheresis is the last-resort therapeutic option for patients with highly elevated atherogenic lipoproteins levels. Facing the introduction of the PCSK9i, we analyzed to which extent they might replace LA. Methods: In our lipidology center comprising a department for 1000 outpatients and an apheresis unit for more than 5000 sessions annually we reviewed the efficacy and safety of PCSK9i in 152 persons having an indication for LA. Results: The mean reduction of LDL-Cholesterol (LDL-C) under 4 months of PCSK9i administration was 53.03%. In 51 patients the target values could not be achieved. 68 persons suffered from adverse effects: influenza symptoms (23), muscle and joint pains (22), local skin reactions (7), collapse (8) and exanthema (5). In 26 subjects the side effects were long-term. Because of the side effects the PCSK9i medication was switched (from alirocumab to evolocumab or vice versa) in 7 and completely terminated in 11 patients. PCSK9i were administered in 35 long-term apheresis patients with severe hypercholesterolemia. 8 of them could stop the apheresis. 27 persons continued the extracorporeal treatment because of side effects related PCSK9i termination in 4 subjects and additionally elevated lipoprotein(a) in other patients. Conclusions: Only 23% from patients with highly elevated LDL-C could stop apheresis treatment due to PCSK9i. The incidence of side effects as well as the achievement of LDL-C target values in a real clinical setting are in clear contrast to study data including speculations on the future perspective of apheresis therapy.