

Is the stent enough? Real life lipid management after percutaneous coronary intervention in acute coronary syndromes

Irzal Hadžibegović^{1*},
Ivana Jurin¹,
Ivan Skorić²,
Miroslav Raguz¹,
Ilko Vuksanović¹,
Mario Udovičić¹,
Ante Lisičić¹,
Tomislav Špičić¹,
Nikola Pavlović¹,
Marin Pavlov¹,
Aleksandar Blivajs¹,
Tomislava Bodrožić
Džakić Poljak¹,
Anđela Jurišić¹,
Dominik Buljan¹,
Šime Manola¹

¹University Hospital Dubrava,
Zagreb, Croatia

²University of Zagreb, School
of Medicine, Zagreb, Croatia

KEYWORDS: acute coronary syndrome, percutaneous coronary intervention, dyslipidemia.

CITATION: *Cardiol Croat.* 2023;18(3-4):54. | <https://doi.org/10.15836/ccar2023.54>

***ADDRESS FOR CORRESPONDENCE:** Irzal Hadžibegović, Klinička bolnica Dubrava, Avenija Gojka Šuška 6, HR-10000 Zagreb, Croatia. / Phone: +385-91-5333-091 / E-mail: irzalh@gmail.com

Introduction: Guidelines recommend scrutinized lipid management after percutaneous coronary intervention (PCI) in acute coronary syndromes (ACS), with proposed values of LDL cholesterol (LDL-C) below 1.4 mmol/L.¹ We investigated real-world results of lipid management at least 6 months after PCI in ACS in regard to clinical outcomes.

Patients and Methods: We analyzed in-hospital and follow-up data of patients who underwent PCI in ACS during a 1-year period from 2019 to 2020, were discharged in stable condition with adequate statin dose and other optimal therapy and survived at least 6 months with available control laboratory parameters.

Results: Out of 421 patients discharged with proposed maximum statin therapy after PCI in ACS, only 24% had LDL-C levels <1.4 mmol/L, whereas 47% and 76% patients had LDL-C <1.8, and <2.6 mmol/L, respectively. Among 223 patients who did not reach the goal of at least 1.8 mmol/L, 25 (11%) patients did not take statin regularly or at all, whereas 85 (38%) patients reported inadequately reduced statin dose. Only 7% of patients who took reduced doses or no statin, reported side-effects as the main reason for non-compliance. MACE – a composite of cardiac death, myocardial infarction, any unplanned revascularization, stroke, other thrombotic event, symptomatic heart failure or clinically relevant bleeding occurred in 93 (22%) patients during a median follow-up of 18 months. The highest proportion of MACE (34%) was noted among patients with LDL-C >2.6 mmol/L (HR 1.68; 95% CI 1.15-2.47; significantly higher compared to patients with LDL-C <2.6 mmol/L at follow-up).

Conclusion: Among patients who have an indication for reimbursed advanced (parenteral) lipid therapy early after PCI in ACS, there is a substantial number of patients who need statin dose adjustment and better compliance to statins. Additional education of patients after PCI in ACS to optimize compliance for statin therapy is highly needed, as well as early monitoring of lipid management to optimize outcomes.

RECEIVED:
February 17, 2023

ACCEPTED:
February 22, 2023



LITERATURE

1. Wang Y, Yan BP, Nichol MB, Tomlinson B, Lee VWY. Real-world study of low-density lipoprotein cholesterol levels and cardiovascular outcomes in Chinese: A retrospective cohort study in post-percutaneous coronary intervention acute coronary syndrome patients. *Int J Cardiol.* 2017 Dec 15;249:18-24. <https://doi.org/10.1016/j.ijcard.2017.07.016>