

Secondary Prevention

One year after the dyslipidemia esc guidelines: which impact in a high cardiovascular risk population is shown?

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INTRODUCTION: After publication of the 2019 ESC Guidelines for dyslipidemia, the LDL cholesterol target in patients with very high cardiovascular risk was reduced from 70 mg/dl to 55 mg/dl. Currently, there is more and more evidence that getting these levels is very important in prognosis, to avoid new cardiovascular events. The paradigm of this situation could be represented by young patients after STEMI, in which secondary prevention is essential to achieve a long-life expectancy.

OBJECTIVE: The aim of the present study is to analyze the impact the new guidelines have had on the control of LDL cholesterol in a population of young patients after STEMI, one year after their publication.

METHODS: A total of 101 consecutive young patients (aged ≤ 40 years) presenting with STEMI admitted at our center between 2006 and 2017 were included. There were no exclusion criteria. We collect demographic, clinical and treatment information, and laboratory values in september/2019 and again one year later.

RESULTS: Out of 101 patients, 89 were male (88.1%). Mean age was 35.87 ± 4.07 years. Among the classic cardiovascular risk factors, dyslipidemia (44.5%) was the second one most prevalent in our cohort, after smoking (93.1%).

In September/2019, only 66.3% of our patients had a recent LDL-cholesterol control, and only 20.9% of them had a target LDL-cholesterol lower than 55 mg/dl ("LDL-c -goal"). During the following year, a new determination of LDL cholesterol was only carried out in 18 patients out of the total sample, with these results: 15 patients had an LDL > 55 mg/dl; 2 patients maintained an "LDL-c-goal", and only a single patient achieved optimal control (from 81 mg/dl to 39 mg/dl) coinciding with the change from low to high intensity statin.

Regarding lipid-lowering treatment, in September/2019 the 87.7% of our population were taking statins, 21.9% ezetimibe, and 0.0% PCSK9-inhibitors. In that moment, in 6 patients, the lipid-lowering treatment was reduced (all of them had LDL values were between 65-105 mg/dl). One year later, in September/2020, 82.2% were taking statins, 21.9% ezetimibe, and in 1 patient was started with the PCSK-9 inhibitor.

Thirteen patients (12.9%) had suffered a reinfarction during follow-up, but none in the last year.

CONCLUSIONS: Despite of the new LDL-cholesterol target established by the ESC Guidelines, we have not improved our lipid control in a population with high cardiovascular risk -with a percentage of cardiovascular events during mean follow-up that is not negligible-, being only 1 of each 5 patients correctly treated. We must carry out a closer clinical and analytical follow-up, by increasing our efforts in secondary prevention, and perhaps the Cardiac Rehabilitation Units can play an essential role in this objective. It is possible that the Covid-19 pandemic could have influenced these results.

Abstract Figure. Lipid-lowering treatment.

