



ORIGINAL ARTICLE

# Lipid control in patients with coronary artery disease in a healthcare area in Cáceres (Spain): LIPICERES study<sup>☆</sup>



José J. Gómez-Barrado<sup>a,\*</sup>, Carolina Ortiz<sup>a</sup>, Marta Gómez-Turégano<sup>a</sup>,  
Paula Gómez-Turégano<sup>a</sup>, Francisco J. Garcipérez-de-Vargas<sup>b</sup>, Pablo Sánchez-Calderón<sup>b</sup>

<sup>a</sup> Complejo Hospitalario Universitario de Cáceres, Hospital San Pedro de Alcántara, Cáceres, Spain

<sup>b</sup> Hospital Don Benito-Villanueva, Don Benito, Badajoz, Spain

Received 19 June 2016; accepted 1 September 2016

## KEYWORDS

Dyslipidaemia;  
Low density lipoprotein cholesterol;  
Cardiovascular risk;  
LDLc targets

## Abstract

**Introduction and objectives:** Current guidelines recommend a low-density lipoprotein cholesterol (LDLc) target of <70 mg/dl for patients with coronary artery disease. Despite the well-established benefits of strict lipid control, the most recent studies show that control rate of lipid targets are alarmingly low.

An analysis was performed on the lipid targets attained according to current guidelines for the prevention of cardiovascular disease in coronary patients in a Cáceres healthcare area.

**Methods:** An observational and cross-sectional study was carried out in a healthcare area in Cáceres (Spain). The study included a total of 741 patients admitted for coronary disease between 2009 and 2015 with available lipid profile in the last 3 years. Total cholesterol, high-density lipoprotein cholesterol (LDLc), high-density lipoprotein cholesterol (HDLc), triglycerides (TG) and non-HDLc were analysed.

**Results:** The majority (74.4%) of patients were male, with a mean age of  $68.5 \pm 13.1$  years;  $76.3 \pm 11.8$  for women and  $65.8 \pm 12.6$  for men ( $p < 0.001$ ).

A total of 52.3% patients achieved the LDLc target of <70 mg/dl, with no gender differences. Only 44.8% of the patients <55 years achieved their lipid targets, compared to 59.3% of the patients >75 years.

About 68.2% of men had an HDLc > 40 mg/dl, and 54.8% of women had an HDLc > 50 mg/dl. Overall, 79.4% of patients had a TG < 150 mg/dl, with no gender differences, and 59.8% had a non-HDLc < 100 mg/dl.

<sup>☆</sup> Please cite this article as: Gómez-Barrado JJ, Ortiz C, Gómez-Turégano M, Gómez-Turégano P, Garcipérez-de-Vargas FJ, Sánchez-Calderón P. Control lipídico en pacientes con enfermedad coronaria del Área de Salud de Cáceres (España): estudio LIPICERES. Clin Invest Arterioscler. 2017;29:13–19.

\* Corresponding author.

E-mail addresses: [jjgomezbarrado@gmail.com](mailto:jjgomezbarrado@gmail.com), [jjgbarrado@unex.es](mailto:jjgbarrado@unex.es) (J.J. Gómez-Barrado).

**PALABRAS CLAVE**

Dislipidemia;  
 Colesterol de las  
 lipoproteínas de baja  
 densidad;  
 Riesgo  
 cardiovascular;  
 Objetivos cLDL

**Conclusions:** Approximately one half of patients with coronary disease do not achieve their target lipid levels as defined in the European guidelines, and this rate is less than reported in previous studies.

There are no gender differences in achieving lipid goals, and age is a predictor of adherence.  
 © 2017 Published by Elsevier España, S.L.U. on behalf of Sociedad Española de Arteriosclerosis.

## Control lipídico en pacientes con enfermedad coronaria del Área de Salud de Cáceres (España): estudio LIPICERES

**Resumen**

**Introducción y objetivos:** En pacientes con enfermedad coronaria las guías establecen como objetivo un colesterol asociado a lipoproteínas de baja densidad (cLDL) <70 mg/dl. A pesar de las evidencias del beneficio de un estricto control lipídico, el grado de consecución de objetivos es alarmantemente bajo en los estudios más recientes.

Hemos analizado el grado de cumplimiento de objetivos lipídicos en pacientes coronarios de nuestra área sanitaria.

**Métodos:** Estudio observacional y transversal realizado en el Área de Salud de Cáceres (España). Se incluyeron 741 pacientes coronarios ingresados entre 2009-2015 con un perfil lipídico en los últimos 3 años. Se analizaron: colesterol total, cLDL, colesterol asociado a lipoproteínas de alta densidad (cHDL), triglicéridos (TG) y colesterol-no-HDL.

**Resultados:** El 74,4% eran varones. La edad media fue de  $68,5 \pm 13,1$  años:  $76,3 \pm 11,8$  en las mujeres y  $65,8 \pm 12,6$  en los varones ( $p < 0,001$ ).

El 52,3% tenían un cLDL < 70 mg/dl, sin diferencias entre sexos; estaban en objetivos el 44,8% de los pacientes <55 años frente al 59,3% de los > 75 años.

Tenían un cHDL > 40 mg/dl el 68,2% de los varones y un cHDL > 50 mg/dl el 54,8% de las mujeres. Mostraron unos TG < 150 mg/dl el 79,4%, sin diferencias entre sexos, y un colesterol-no-HDL < 100 mg/dl el 59,8%.

**Conclusiones:** La mitad de pacientes coronarios no alcanzan los objetivos de control lipídico, y esta proporción es muy inferior a la comunicada en estudios previos.

No existen diferencias en el cumplimiento de objetivos por sexos, y la edad es un predictor de cumplimiento.

© 2017 Publicado por Elsevier España, S.L.U. en nombre de Sociedad Española de Arteriosclerosis.

**Introduction**

One of the principal determinants of cardiovascular risk in patients with coronary disease (CD) is changes in the lipid metabolism.

The majority of interventional studies have reported beneficial cardiovascular effects with a decrease in plasma levels of low-density lipoprotein cholesterol (LDLc) and have shown that LDLc values of <70 mg/dl are related to a decrease in cardiovascular events and mortality in high-risk subjects. The European clinical practice guidelines for dyslipidaemia and cardiovascular prevention<sup>1,2</sup> seek a target LDLc of <70 mg/dl in patients at very high cardiovascular risk. Recently, LDLc figures of  $\approx 50$  mg/dl have shown additional benefits in cardiovascular prevention<sup>3</sup> and are related to a reduction in the volume of plaque and an increase in vascular lumen.<sup>4</sup> More recently, the IMPROVE-IT study just corroborated the lipid theory by demonstrating that the further LDLc levels were lowered, the better prognosis was obtained, regardless of how they were lowered.<sup>5</sup>

What is known as the atherogenic lipid triad can appear in many patients with CD and is expressed by a moderate increase in plasma triglycerides (TG) levels and particles of LDLc and a decrease in levels of high-density lipoprotein cholesterol (HDLc), all combined in the figure for non-high density lipoprotein cholesterol (non-HDLc).<sup>6</sup> The existence of small, dense particles of LDLc have been described in these patients; they can appear with apparently normal LDLc numbers, similar to those observed when there is a lower number of LDLc particles of larger size. The apolipoprotein B numbers in these cases are a reliable marker of the number of circulating atherogenic particles capable of crossing and depositing in the arterial wall, and an adequate surrogate for apolipoprotein B is non-HDLc. A recent meta-analysis of 62,154 patients included in 8 studies showed that non-HDLc correlated better with cardiovascular risk than LDLc.<sup>7</sup> Some authors therefore rely on the use of apolipoprotein B or non-HDLc and have proposed cut-off target values for non-HDLc of 30 mg above the cut-off values for LDLc.

Download English Version:

<https://daneshyari.com/en/article/8924045>

Download Persian Version:

<https://daneshyari.com/article/8924045>

[Daneshyari.com](https://daneshyari.com)