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ORIGINAL ARTICLE

Causes of failure to achieve the low density lipoprotein cholesterol therapeutic target in patients with high and very high vascular risk controlled in Lipid and Vascular Risk Units. EROMOT study☆

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KEYWORDS
Low-density lipoprotein cholesterol;
Lipid units;
Therapeutic target

Abstract
Objectives: To determine the extent to which low-density lipoprotein cholesterol (LDL-C) therapeutic targets are achieved in patients with high and very high vascular risk treated in lipid units, and the reasons why these targets are not met.
Patients and method: Observational and retrospective multi-centre study. Patients over the age of 18 with high or very high vascular risk according to the criteria set forth by the 2012 European guidelines on cardiovascular disease prevention who were consecutively referred to lipid units between January and June 2012 and with follow-up two years after the first visit were included.

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Results: 243 patients from 16 lipid units were enrolled. The mean age was 52.2 years (SD 13.7) and 62.6% of the patients were male. 40.3% were classified as very high risk. At the first visit, 86.8% were on lipid-lowering treatment (25.1% on combination therapy), which rose to 95.0% at the second visit (47.3% on combination therapy) ($p < 0.001$). A total of 28% (95% CI: 22.4–34.1) achieved the therapeutic target. In terms of the reasons why therapeutic targets were not met, 24.6% of failures were attributed to the medication (10.3% maximum tolerated dose and 10.9% due to the onset of side effects), 43.4% were attributed to the doctor (19.4% due to clinical inertia, 13.7% due to having deemed the goal to have been achieved) and 46.9% were attributed to the patient, primarily non-adherence to treatment (31.4%).
Conclusions: LDL-C therapeutic targets were achieved in around one third of patients. Patient non-adherence, followed by clinical inertia, are the primary causes that could explain these results.

PALABRAS CLAVE
Colesterol de las lipoproteínas de baja densidad;
Unidades de Lípidos;
Objetivo terapéutico

Causas de no consecución del objetivo terapéutico del colesterol de las lipoproteínas de baja densidad en pacientes de alto y muy alto riesgo vascular controlados en Unidades de Lípidos y Riesgo Vascular. Estudio EROMOT

Resumen
Objetivos: Determinar el grado de consecución del objetivo terapéutico del colesterol de las lipoproteínas de baja densidad (cLDL) en pacientes de alto y muy alto riesgo vascular atendidos en las unidades de lípidos, así como las causas de no consecución.
Pacientes y método: Estudio observacional retrospectivo multicéntrico. Se incluyó a los pacientes mayores de 18 años con alto o muy alto riesgo vascular, según los criterios de la Guía europea de prevención cardiovascular de 2012, remitidos de forma consecutiva a las unidades de lípidos entre enero y junio del 2012 y con seguimiento a los 2 años de la primera visita.
Resultados: Se incluyó a 243 pacientes procedentes de 16 unidades de lípidos. La edad media fue de 52,2 años (DE 13,7) con un 62,6% de varones. Un 40,3% eran de muy alto riesgo. En la primera visita seguían tratamiento hipolipidemiante el 86,8% (en combinación 25,1%) y en la segunda visita el 95,0% (en combinación 47,3%) ($p < 0,001$). El 28% (IC del 95%: 22,4-34,1) alcanzó el objetivo terapéutico. Sobre las causas de no consecución, el 24,6% de ellas estaban relacionadas con el medicamento (10,3% máxima dosis tolerada y 10,9% por aparición de efectos adversos), el 43,4% con el médico (19,4% por inercia, 13,7% por considerar que ya ha llegado al objetivo) y con el paciente el 46,9%, destacando el incumplimiento terapéutico (31,4%).
Conclusiones: Se consiguieron los objetivos de cLDL en cerca de un tercio de los pacientes. La baja adherencia del paciente, seguida de la inercia médica, son las causas más frecuentes que pueden explicar estos resultados.

Introduction

Lipid metabolism disorders are one of the primary causes of vascular risk.[1] Reducing low-density lipoprotein cholesterol (LDL-C) concentrations by 1 mmol/l (38.8 mg/dl) results in a 22% fall in the relative risk of presenting a severe cardiovascular (CV) event.[2]

It is important for patients with dyslipidaemia, and particularly patients at high or very high risk, to achieve the therapeutic targets recommended by the CV prevention clinical practice guidelines (CPGs).[1] Studies conducted in Europe[3–5] and in Spain[6–9] have revealed the low frequency with which these LDL-C treatment goals are achieved. The EDICONDIS-ULISEA study[10] estimated that 44.7% of dyslipidaemic patients treated at the Lipid and Vascular Risk Units of the Spanish Arteriosclerosis Society (Sociedad Española de Arteriosclerosis, SEA) achieved their LDL-C therapeutic target as defined by the 2007 European guidelines on CV disease prevention.[11] However, these results fell to below 20%[6–10] in patients at high or very high risk when the criteria of the most recent European guidelines were applied.[12]

The causes that could explain inadequate LDL-C control have been attributed to the organisation of the health system, to doctors and to the patients themselves.[13] One of the causes attributed to doctors is clinical inertia,[13–16] which