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# Dyslipidemia: what it is, how to identify, causes and treatment. Clarisse Bezerra<sup>1</sup>

### **SHORT COMMUNICATION**

#### Abstract

Dyslipidemia is a disease characterized by abnormalities in blood lipid levels, mainly total cholesterol and triglycerides. Other changes include low high-density lipoprotein cholesterol (HDL-C) and high levels of low-density lipoprotein cholesterol (LDL-C)

**Keywords:** Cholesterol, Dyslipidemia, HDL, LDL.



### Dislipidemia: o que é, como identificar, causas e tratamento.

#### Resumo

A dislipidemia é uma doença que se caracteriza por anomalias nos níveis de lípidos no sangue, principalmente do colesterol total e dos triglicéridos. Outras alterações incluem colesterol de lipoproteína de alta densidade baixo (HDL-C) e níveis elevados de colesterol de lipoproteína de baixa densidade (LDL-C)

Palavras-chaves: Colesterol, Deslipidimia, HDL, LDL

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## INTRODUÇÃO

Dyslipidemia is a situation characterized by changes in cholesterol and triglyceride levels, which can happen due to genetics or be a consequence of a diet rich in fat, lack of physical activity, type 2 diabetes and chronic diseases that affect the liver.

Thus, in this situation, it is common to observe an increase in LDL cholesterol and triglyceride levels and a decrease in HDL cholesterol levels in the blood test, increasing the risk of deposition of fatty plaques inside the blood vessels, which increases the risk of heart problems.



Figure 1: Illustration of fatty plaques in the blood.

## How to identify dyslipidemia?

Dyslipidemia does not lead to the appearance of signs or symptoms and, therefore, in order to be identified, blood tests must be carried out to assess the levels of total cholesterol, LDL and HDL cholesterol, and triglycerides. These tests may be ordered routinely or when the physician wants to investigate dyslipidemia due to a family history of dyslipidemia or atherosclerosis or onset of atherosclerotic disease before age 60.

Thus, in the presence of higher levels of LDL and triglycerides or a decrease in HDL, the doctor can confirm dyslipidemia, however, it is necessary to carry out other tests that help identify the cause and verify the risk of cardiovascular disease.



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In some cases, the doctor may request that the levels of apolipoprotein B (Apo B) and C-reactive protein (CRP) be measured, as this is an indicator of inflammation and also helps to identify the risk of cardiovascular diseases.

#### Main causes

Dyslipidemia occurs due to changes in the body that lead to excessive production of triglycerides and LDL cholesterol or decreased production of HDL. Thus, this type of alteration can be classified into two main types according to the cause:

**Primary dyslipidemia**, which occurs due to genetic factors, and in these cases it is possible to observe other people in the family with dyslipidemia;

**Secondary dyslipidemia**, which arises as a result of lifestyle or other diseases that the person has.

Secondary dyslipidemia is the most common type of dyslipidemia and may occur as a result of the following situations:

- Sedentary lifestyle and high-fat diet;
- Type 2 diabetes;
- Obesity;
- Excessive alcohol consumption;
- Chronic renal failure;
- Chronic liver disease;
- Hypothyroidism;
- Smoking;
- Eating disorders such as anorexia or bulimia;
- Cushing's Syndrome;

Use of some medicines, such as diuretics, beta blockers, contraceptives, corticosteroids and anabolic steroids, for example.

Thus, it is important that the cause of dyslipidemia is identified so that the doctor can indicate the most appropriate treatment to regulate cholesterol levels and prevent the development of complications.

#### How the treatment is done?

Treatment for dyslipidemia aims to control cholesterol levels and prevent the development of cardiovascular diseases, in addition, treatment may vary according to the cause of dyslipidemia, and it may be necessary to use specific remedies for each situation and to reduce levels. of LDL cholesterol.



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It is also important that the person avoids smoking and consuming excessive alcoholic beverages, in addition to being recommended to practice physical activity on a regular basis and have a diet low in saturated fats and sugar and rich in fruits, vegetables and fiber-rich foods.<sup>123</sup>

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