

THE EFFECT OF LIFESTYLE MODIFICATION IN A PATIENT WITH SEVERE HYPERTRIGLYCERIDEMIA

EFEITO DAS MUDANÇAS DO ESTILO DE VIDA EM PACIENTE COM HIPERTRIGLICERIDEMIA GRAVE

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ABSTRACT

This study reports a case of severe hypertriglyceridemia in a 61-year-old woman, identified during a cardiologic routine consultation. Despite pharmacological prescription, lipid levels remained uncontrolled. The patient is retired and sedentary, lacks healthy lifestyle habits, and lives alone. She was referred to nutritional counseling, and a structured lifestyle intervention program was proposed, including dietary modification, initiation of regular physical activity, and encouragement of social engagement. Nutritional recommendations followed the latest Brazilian guidelines for dyslipidemia, combined with strategies to promote social reintegration. In this case, the combination of lifestyle intervention, body image improvements, and return to social interaction reduced the serum triglyceride levels. Thus, we believe that these additional actions were crucial to accomplish the proposed dietary plan and avoid the risk of pancreatitis.

Keywords: Hypertriglyceridemia; Lifestyle; Healthy diet; Diet therapy.

RESUMO

Relatamos um caso de hipertrigliceridemia grave em uma mulher de 61 anos, durante uma consulta de rotina no ambulatório de cardiologia, que foi diagnosticada com hipertrigliceridemia grave e resistente ao tratamento medicamentoso prescrito. Ela é aposentada, sedentária, não apresentava hábitos de vida saudáveis e mora sozinha em seu domicílio. Foi encaminhada ao ambulatório de nutrição, e sugerimos um plano terapêutico para mudanças no estilo de vida. A combinação de terapias de estilo de vida foram: atividade física, modificação dietética e inserção na vida social. As recomendações dietéticas seguiram as propostas pela atualização da diretriz brasileira de dislipidemia, com adição do convívio social. Neste caso, foi demonstrado a redução drástica dos níveis séricos de triglicédeos, com a combinação de terapia de estilo de vida, aliado à melhora de imagem corporal e retorno ao convívio social. Assim, acreditamos que estes adicionais foram cruciais para motivar o seguimento do plano dietético proposto e evitar risco de pancreatite.

Palavras-chave: Hipertrigliceridemia; Estilo de vida; Dieta saudável; Dietoterapia.

INTRODUCTION

Body weight and dietary composition are risk factors for dyslipidemia, including isolated hypertriglyceridemia^{1,2}. This condition is characterized by increased serum triglyceride levels, resulting in alterations in lipid metabolism, particularly affecting chylomicron lipoproteins and very low-density lipoprotein^{1,3}.

Triglyceride levels above 500mg/dL are classified as severe hypertriglyceridemia and potentially increase the risk of acute pancreatitis, requiring drug treatment alongside lifestyle changes^{1,2,4}. Manage-

ment should include a thorough evaluation of causative factors to guide individualized interventions³. This case report encompassed lifestyle changes associated with multidisciplinary care at the school clinic as a potential aggregator in choosing evidence-based non-drug treatment for hypertriglyceridemia.

CASE REPORT

A 61-year-old woman, retired, former smoker, and sedentary, was referred for nutritional follow-up at a school clinic in Olinda after being diagnosed with severe isolated hypertriglyceridemia during a routine cardiology consultation. The anamnesis re-

vealed dietary errors with a preference for carbohydrate-rich foods (i.e., sweets), and a weight gain of 12 kg over the last three years.

She denied food intolerances and allergies and was resistant to the use of lipid-lowering drugs. Anthropometric assessment revealed a weight of 64 kg; height of 1.55 m; body mass index of 26.6 Kg/m²; waist circumference of 90 cm; waist-to-hip ratio of 0.85; and neck circumference of 34.5 cm. These values indicated an eutrophic status and strong predictors for cardiovascular disease. The serum triglyceride levels were at 548 mg/dL.

An intervention focusing on lifestyle changes was initiated, including the daily practice of physical activities, a normoglycemic (48% of the total caloric intake), normolipidic (35% of the total caloric intake), and hyperproteic (16% of the total caloric intake) diet, adjusted to the socioeconomic status of the patient. Emphasis was placed on adequate intake of both soluble and insoluble fiber, increased consumption of polyunsaturated and monounsaturated fatty acids (e.g., fish containing high levels of eicosapentaenoic and docosahexaenoic), complex carbohydrates, grains, fruits, and vegetables, all while maintaining affordability.

Physical activity was introduced via participation in the “City Academy Project”, a public health program of the city of Recife, which promotes community-based exercise. Additionally, the patient was encouraged to engage in home-based dance activities for at least one hour daily.

The patient demonstrated excellent adherence, joining a local gym and consistently participating in physical activities. Over four months, she achieved an intentional weight loss of 8 kg, reported improved body image satisfaction, adopted healthier eating habits, and experienced a substantial reduction in serum triglyceride levels from 548 mg/dL to 133 mg/dL. Importantly, she also re-established social interactions and described enhanced self-esteem and psychosocial well-being, attributing these improvements to the support received from the multidisciplinary care team.

DISCUSSION

The improvement in the triglyceride levels of the patient resulted from adherence to the proposed diet and nutritional counseling. This positive outcome was made possible by the motivation fostered through the supportive approach of the multidisciplinary

team, which provided confidence in facing the proposed challenges and also demonstrated sensitivity to the environment in which the patient was inserted.

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