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THE RELATIONSHIP BETWEEN CHILDREN'S INTESTINAL MICROBIOTA AND ALLERGY TO COW'S MILK PROTEIN (CMPA)

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INTRODUCTION

The intestinal microbiota plays a major role in the course of cow's milk protein allergy (CMPA), considered the most common allergy in early childhood. Studies report the significant importance of the microbiota in modulating the immune response, in addition to showing that diet and intestinal colonization are closely related to immunological tolerance. This review aims to analyze the different aspects of the intestinal microbiota in the context of CMPA.

METHODOLOGY

A literature review was carried out in the Medline, Lilacs and Pubmed databases, using the keywords "milk hypersensitivity", "microbiota" and "children". The articles were selected using the Portuguese or English language as inclusion criteria. published between 2016 and 2021, those that did not include these categories were excluded. Of the total of 53 results, 8 articles were used for the following review.

DISCUSSION

The constitution of the intestinal microbiota has high relevance with regard to promoting the maturity of the immune system, as it is a barrier against food-derived antigens. Early intestinal bacterial colonization is essential for promoting the body's immune balance, while dysbiosis leads to allergic manifestations. Deprivation of breast milk consumption in the first years of life, cesarean delivery, maternal eating habits and intestinal metabolism, intrapartum antibiotic prophylaxis and antibiotic therapy in childhood are conditions that can influence the development of CMPA. Probiotics, such as Lactobacillus rhamnosus GG (LGG), are used in the management of food allergies as immunomodulators, in addition to enhancing the mucous-intestinal barrier, inhibiting the action of pathogenic bacteria and degrading allergy-causing protein antigens. An advantage was observed in the association of LGG with supplementation with a widely hydrolyzed casein formula in terms of reducing inflammation, the clinical picture and the duration of the disease. Furthermore, it is described that the administration of LGG in the pre- and postnatal period is promising in preventing CMPA, which highlights the influence of the microbiota on the development of this allergy.

CONCLUSION

It is indisputable that the health of the gastrointestinal tract directly affects the general health of the body. Furthermore, it is necessary to explore resources to eliminate the risks of allergic manifestations, such as preventive and therapeutic treatment with probiotics, in order to provide intestinal homeostasis and the development of the individual's health.