

## INTERDISCIPLINARY INTEGRATION BETWEEN GIARDIASIS AND IRON DEFICIENCY ANEMIA

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The inclusion of children in daycare centers and schools constituted an important change in the current social configuration, since the relationship between giardiasis and iron deficiency anemia has aroused increasing interest in the context of public health. Currently, there is a high mortality rate among children affected by parasites. Parasitosis is considered one of the factors responsible for delayed development in children and impairs the absorption of micronutrients, especially iron. This is a bibliographical review of the reference literature regarding the relationship between giardiasis and iron deficiency anemia. The objective of this work is to report the interdisciplinary and pathological integration of giardiasis and iron deficiency anemia, as well as its greater prevalence in children in deprived socioeconomic conditions. In the age group of 0 to 5 years, the presence of giardiasis often determines the nature of iron deficiency anemia, due to poor nutrition, conditions, products and services, poor basic sanitation related to public health housing. During this period, children have more contact with each other, which favors this transmission. Giardiasis is an intestinal infection caused by the protozoan *Giardia lamblia* that mainly affects children in underdeveloped countries with weakened immune systems. Clinical symptoms include various etiologies of intestinal disorders, changes in physical and mental development, diarrhea, malnutrition, anatomical abnormalities, and iron deficiency anemia. This anemia is characterized by a decrease in hemoglobin concentration due to a reduction in iron reserves in the body, exacerbating the socioeconomic situation of the child, which predisposes to intestinal parasitic diseases created by malabsorption, due to the morphology of the protozoan that contains a suckorial disc that favors its adhesion. In the intestinal wall and, consequently, the worsening of the anemic condition. The pathological condition depends on the parasite load caused by giardiasis, nutritional status and physiological status. Laboratory tests are confirmed by parasitological examination of feces (60% to 70% of the diagnosis in three samples), ELISA technique (Enzyme Linked Immuno Sorbent Assay) or immunofluorescence for detection of antigens in feces (sensitivity and specificity of 90% to 100%) and Polymerase Chain Reaction (PCR) technique. It is imperative to prevent giardiasis, as it is a parasitic infection that frequently affects children with socioeconomic problems such as poor sanitation, family overload and lack of health education.

**Keywords:** Giardiasis; Anemia; Children; Iron Deficiency.

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