PARASITO2025
29º CONGRESSO BRASILEIRO DE PARASITOLOGIA

HIGHER *Strongyloides stercoralis* IGG SEROPREVALENCE IN IMMUNOSUPPRESSED RHEUMATIC PATIENTS COMPARED TO IMMUNOCOMPETENT INDIVIDUALS

MARIÂNGELA DE LIMA ALVES[1], LARA CARDOSO RABELLO[1], VINÍCIUS CAMPOS MIRANDA[1], HUMBERTO MACHADO RESENDE[1], ROBERTO RANZA[1], CRISTIANE GUIMARÃES MORAIS[2], JORDANIA COSTA PINTO[3], LILIAN LACERDA BUENO[3], RICARDO TOSHIO FUJIWARA[3], NATÁLIA BERNE PINHEIRO[4], RODRIGO RODRIGUES CAMBRAIA-MIRANDA[1]

[1]UNIVERSIDADE FEDERAL DE UBERLÂNDIA (UFU), UBERLÂNDIA, MG, BRAZIL.
[2]INSTITUTO FEDERAL DE EDUCAÇÃO CIÊNCIA E TECNOLOGIA DO TRIÂNGULO MINEIRO (IFTM), UBERABA, MG, BRAZIL.
[3]UNIVERSIDADE FEDERAL DE MINAS GERAIS (UFMG), BELO HORIZONTE, MG, BRAZIL.
[4]UNIVERSIDADE FEDERAL DE PELOTAS (UFPEL), PELOTAS, RS, BRAZIL.

Strongyloides stercoralis is a soil-transmitted helminth capable of causing chronic infections, particularly in immunosuppressed individuals. This study aimed to evaluate IgG seroreactivity and antibody frequency in immunosuppressed rheumatic patients and immunocompetent individuals, using a synthetic peptide predicted to be species-specific and recognized by B cells.
A total of 425 serum samples were analyzed, including 256 from immunosuppressed patients (88 rheumatoid arthritis [RA], 57 spondyloarthritis [SpA], 76 systemic lupus erythematosus [SLE], 18 other lupus [LU], and 17 other autoimmune rheumatic diseases [ORD]) and 169 from immunocompetent individuals (51 children, 118 adults). The overall seroprevalence was 38.11%, with significantly higher prevalence in immunosuppressed (50.19%) than in immunocompetent individuals (19.64%). By group, IgG prevalence was 31.46% in RA, 68.42% in SpA, 59.21% in SLE, 50% in LU, 47.06% in ORD, 24.79% in immunocompetent adults, and 7.84% in children.
Comparing seroreactivity between rheumatic diseases and their respective controls, higher IgG seroreactivity was observed in SLE ($p < 0.0001$) and in immunocompetent adults compared to immunocompetent children ($p = 0.0048$). In contrast, RA patients showed reduced seroreactivity compared to their controls ($p = 0.0189$). Regarding antibody frequency, higher IgG levels were found in SLE ($p < 0.0001$), SpA ($p = 0.0227$), and immunocompetent adults compared to children ($p = 0.0110$). These findings suggest that *S. stercoralis* exposure and immune response differ across immune conditions, with higher prevalence in immunosuppressed patients, particularly in SLE and SpA, and in immunocompetent adults compared to children. This highlights the importance of screening for *S. stercoralis* in immunosuppressed individuals to prevent potential complications.

Supported by: FAPEMIG, CAPES.

Keywords: *Strongyloides stercoralis*, Autoimmune diseases, Seroprevalence