Strongyloides stercoralis Hyperinfection in Pemphigus Vulgaris: A Neglected Preventable Fatality

Hiperinfeção por *Strongyloides stercoralis* em Pênfigo Vulgar: Uma Fatalidade Prevenível e Negligenciada

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Palavras-chave: Estrongiloidíase/diagnóstico; Estrongiloidíase/induzida quimicamente; Estrongiloidíase/tratamento farmacológico; Imunossupressores/efeitos adversos; Pênfigo/tratamento farmacológico; Strongyloides stercoralis; Superinfecção

Dear Editor,

We read with great interest the recent case report by Tribolet de Abreu *et al* describing *Strongyloides stercoralis* hyperinfection syndrome in a patient with pemphigus vulgaris under immunosuppressive therapy.[1] "This case highlights critical lessons that extend beyond dermatology, offering valuable insights into general internal medicine, tropical medicine, and the safety of immunosuppressive therapy.".

While *S. stercoralis* is endemic to tropical and subtropical regions, its chronic indolent course often remains asymptomatic, allowing for silent persistence for decades via autoinfection.[2] "The use of corticosteroids has been identified as the most significant risk factor for precipitating hyperinfection or disseminated disease, due to their immunomodulatory effect that inhibits eosinophil function and accelerates parasite replication.[3] In the patient described, intermittent eosinophilia preceded the life-threatening complication, underscoring the need to integrate absolute eosinophil count monitoring into routine pre-immunosuppressive assessment, especially in at-risk populations.

Moreover, this case raises an urgent call to re-evaluate current screening strategies. Stool microscopy, despite being widely available, lacks sensitivity due to irregular larval shedding.[2] Although serological assays offer superior sensitivity, their availability remains inconsistent in lower-income and endemic regions. Enzyme-linked immunosorbent assay (ELISA)-based methods have demonstrated high sensitivity but may be limited by cross-reactivity with other helminths. Moreover, molecular assays, although highly specific, are often inaccessible in resource-constrained settings.[2,3] In this context, expert groups explicitly recommend that, in endemic regions with limited diagnostic capacity, empirical ivermectin administration before initiating immunosuppressive therapy should be considered a pragmatic and feasible preventive strategy.[3-5]

For migrant populations originating from endemic regions, pre-emptive screening or treatment is particularly important, as infection may persist for decades after leaving endemic areas.[6] Importantly, autochthonous cases have also been reported in non-endemic countries through risk factors such as agricultural work and prolonged soil contact.[7] Therefore, current guidelines emphasize risk-based approaches that combine epidemiological history, occupational exposure, and immune status in clinical decision-making.[3,6] Such a pre-emptive approach could prevent catastrophic outcomes, as mortality for untreated hyperinfection approaches 75%.[2]

This case also underscores an often-overlooked aspect of pemphigus management protocols. While baseline tuberculosis screening is routinely performed prior to initiating rituximab or high-dose corticosteroids, screening for *Strongyloides stercoralis* remains infrequently implemented—despite posing comparable morbidity risks. Dermatologists, rheumatologists, and oncologists managing immunosuppressive regimens should integrate *S. stercoralis* risk assessment into treatment algorithms, particularly in endemic or migrant populations from endemic areas.

We commend the authors for presenting this clinically and epidemiologically relevant case. We advocate for a paradigm shift from reactive diagnosis to proactive prevention of *S. stercorali* hyperinfection in all immunosuppressed patients at risk. This will require interdisciplinary awareness, updated guidelines, and health policy adaptation to prioritize accessible screening or empirical treatment. By integrating screening options, proposed guidelines, and context-specific strategies for both endemic and non-endemic regions, healthcare systems can significantly reduce preventable fatalities. Only through such measures can we mitigate this silent but preventable cause of mortality in immunocompromised patients.

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AUTHOR CONTRIBUTIONS

NKR: Conceptualization, literature review, manuscript drafting.

SKR: Supervision, validation, critical revision of the manuscript.

NC: Literature review, critical revision of the manuscript.

KLS: Critical revision of the manuscript.

All authors approved the final version to be published.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

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