



HUMANITARIAN DERMATOLOGY/MIGRANT HEALTH

## PRURITUS IN DARK-SKINNED MIGRANTS FROM AFRICA: A SURVEY AT THE INMP OUTPATIENT CLINIC

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**Background:** Pruritus is a common dermatologic symptom frequently associated with a variety of skin and systemic diseases. In few cases, no organic cause can be found, and idiopathic pruritus (IP) is diagnosed. Pruritus appears extremely frequent in dark-skinned persons from Africa with a story of traumatic migratory experience. Whether this finding depends on a genetic predisposition, environmental or psychological factors is uncertain.

**Objective:** Investigate the origin of pruritus in African migrants

**Methods:** Patients were included in the study upon written consent. In patients without systemic and/or cutaneous diseases which could explain the symptom, hematological, parasitological and infectious disease investigations were requested. In selected cases, a 4mm skin biopsy was performed on uninvolved skin and processed for immunohistochemistry.

**Results:** 400 migrants from Africa with diffuse pruritus referred to the INMP outpatient clinic from February 2016 to February 2018. Out of them, in 135 pruritus was not related to skin or systemic conditions, as assessed by anamnesis and clinical exam. Further evaluation revealed hematologic alteration (augmented IgE, eosinophils, liver enzymes and ANA), or latent parasitic infection (schistosomiasis and strongyloidiasis), in 111 out of 135 patients. In the remaining 24 patients a diagnosis of IP was made. Immunohistochemistry on skin samples from IP patients failed to disclose an increased number of CD3, CD8, CD1a, CD15, and c-kit positive cells. However, the Transient Receptor Potential (TRP) channels V1 and TRPA1, molecules involved in the pain and itch sensation, were diffusely and intensely expressed on the epidermis from IP patients, compared to the faint and spotty staining of the control skin.





Conclusions: Numerous migrants from Africa suffers from diffuse pruritus. Extensive investigations allowed to disclose the etiologic cause in most cases. The increased expression of TRP channels in the epidermis of dark-skinned persons with IP requires further studies to understand their potential role in pruritus.

