Introduction: There is limited information on the current status of the infestation by Demodex spp in individuals residing in Latin America. Demodex spp is part of the microbiota of human skin. It may induce or modify preexisting dermatoses. In recent years, several studies that highlight the association between Demodex infestation and the development of rosacea.

Objective:

To establish the prevalence of Demodex infestation in two groups of patients in Latin America.
America. One of the groups was patients with Rosacea and the other patients without facial dermatoses. The secondary objective was to evaluate the degree of concordance between the detection methods used, dermoscopy and Standardized surface skin biopsy (SSSB).

Materials and Methods: A multicenter observational, cross-sectional study was conducted, eleven countries in Latin America, Argentina, Panama, Cuba, Nicaragua, Guatemala, Venezuela, Peru, Uruguay, Mexico, Chile, and Brazil participated. A total of 592 patients, 275 patients with rosacea and 317 patients without facial dermatosis.

Results: SSSB positivity was present in 56% of the patients with rosacea and only 12% of the patients in the group without facial dermatosis had positive SSSB. In the analysis of the dermatoscopy findings, 47% of patients with rosacea versus 11% in patients without facial dermatosis were positive for Demodex tails, and follicular openings were positive in 58% of patients with rosacea versus 20% in the control group. In the analysis of the concordance between the two techniques used for the detection of Demodex, dermatoscopy and SSSB, moderate significant agreement was found between the results (Fleiss' Kapp = 0.54, z = 22.8; p < 0.05; n= 589).

Conclusions: We demonstrate a significant association between Demodex infestation and rosacea in the Latin American population. The methods used, dermatoscopy and SSSB, are easy to reproduce, low cost and high accessibility for most dermatologists.