Dermatology Practical & Conceptual

Scabies Treatment Failure: Beyond Permethrin and Plastic Bags

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To the Editor,

The recent article by Azzolina et al. on scabies treatment outcomes offers important insights into predictors of therapeutic failure [1]. This timely investigation sheds light on clinical and behavioral predictors of treatment failure, an increasingly relevant concern given rising scabies incidence in high-income settings. While I commend the authors for a prospective observational approach and their emphasis on hygiene practices and ivermectin dosing, several aspects warrant further scrutiny and clarification.

First, the study's reliance on non-standardized, self-reported questionnaires introduces inevitable recall bias. This is especially pertinent considering the complex, multi-step nature of scabies management, often involving repeated and varied treatments. As acknowledged by the authors, precise recall of decontamination measures or treatment timelines weeks after administration is likely to be inconsistent. Incorporating a structured diary-based or app-supported adherence tracker could strengthen future investigations.

Second, the categorization into "success" and "failure" groups is based on follow-up at 2–6 weeks, but no data are provided on re-infestation risk or secondary pruritus mimicking active disease. Without standardized diagnostic reassessment (e.g., dermoscopy or skin scraping at follow-up), distinguishing treatment failure from re-infestation or post-scabetic itch remains challenging [2].

Third, the study suggests that permethrin monotherapy is associated with failure. However, the subgroup size (N=6) limits the statistical power to draw firm conclusions about monotherapy failure. Additionally, potential drug resistance, an increasingly reported phenomenon [3], is not assessed via laboratory confirmation, despite being highlighted in the discussion.

Fourth, the statistically significant association between alcohol use for disinfection and treatment failure is intriguing but may reflect underlying confounding, such as inappropriate substitution of alcohol for more effective decontamination strategies rather than indicating a direct causative effect. Notably, the authors mention that mattress disinfection, for instance, was not associated with outcome, suggesting a broader behavioral adherence gap that may drive outcomes more than any single measure.

Finally, the absence of data on total number of previous treatment courses, time from symptom onset to treatment, and socioeconomic determinants (e.g., housing density, employment in high-risk settings) limits external validity. Prior

studies in both high- and low-income settings have emphasized these contextual variables as key determinants of persistent infestation [4,5].

In conclusion, this study offers valuable insight but would benefit from greater methodological rigor and a more nuanced discussion of alternative explanations. As scabies continues its resurgence, especially among marginalized populations, future studies should triangulate patient-reported adherence with clinical, microbiological, and socioeconomic data to develop more effective, context-sensitive strategies.

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