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Comment on Cutaneous Manifestations in Obese Patients Attending Outpatient Department of a Tertiary Care Hospital

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Abstract

This letter appreciates the work of Pandit et al. on cutaneous manifestations in obese patients while highlighting key methodological limitations. It recommends future studies adopt longitudinal designs, include comorbid and age-diverse populations, and apply multivariate analyses to better understand the full dermatologic burden of obesity and improve targeted screening strategies.

Keywords: Comment, Obesity, Outpatients, Skin Diseases, Signs and Symptoms

Dear editor,

We have read an article by Pandit et al. in the Nepal Journal of Dermatology, Venereology & Leprology under the title of "Cutaneous Manifestations in Obese Patients Attending Outpatient Department of a Tertiary Care Hospital." Primarily, it is a cross-sectional study, which provides valuable insights into the dermatological burden associated with obesity, analyzing 226 adults (BMI ≥30 kg/m²) presenting to a tertiary dermatology clinic in Nepal. The most common skin conditions were acrochordons (19.9%), acanthosis nigricans (17.7%), and striae distensae (12.4%). Plantar hyperkeratosis and lymphoedema were significantly associated with higher obesity grades. Most patients were in the 21–40 age range, with a female majority. The findings highlight that certain skin changes can serve as early markers of obesity. The authors advocate for routine dermatological screening in obese populations to facilitate timely intervention for these largely preventable conditions.[1]

The authors have done commendable work; however, the study has some methodological limitations. As a cross-sectional design, this study limits the ability to infer causality or temporality between obesity and skin disorders. Other study designs could better clarify the temporal relationship between increasing BMI and the onset of specific dermatoses. Additionally, only chi-square tests were used; no multivariate or regression analysis was performed. Multivariate analysis could help isolate the effect of BMI on skin disorders from other demographic or behavioral variables. The chi-square tests appropriately identify associations between categorical variables; they cannot adjust for confounders like age, gender, or comorbidities that may influence both obesity and dermatological outcomes. For instance, the higher prevalence of plantar hyperkeratosis in severe obesity (grade II) could be mediated by mechanical stress, insulin resistance, or age-related factors, none of which were controlled for. Multivariate analysis methods (e.g., logistic regression) would isolate BMI's independent effect by adjusting for these variables, clarifying whether observed relationships are direct or confounded.[2] This rigor is essential for clinical inference, as underscored by Mendelian randomization studies confirming obesity's causal role in dermatoses.

Furthermore, the exclusion criteria in this study have limited real-world applicability. As diabetes and chronic kidney disease (CKD) patients were excluded, despite high overlap with obesity.[3,4] While exclusion of diabetics was intended to reduce confounding, it may have masked the full dermatological burden in typical obese populations. Additionally, the age ranges from 21 to 40 years, neglecting the pediatric and geriatric

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populations.[5] Addressing the congenital and sporadic cutaneous manifestations in the obese population can also be a factor not considered in the study.

In conclusion, while Pandit et al. provide valuable data on obesity-related skin manifestations, future research should adopt longitudinal or cohort designs to better establish causal associations. Incorporating multivariate analyses and including comorbid populations such as diabetics and CKD patients would enhance generalizability. Broader age representation, particularly pediatric and elderly groups, is also warranted. Future studies should explore congenital and sporadic dermatoses in obesity to expand our understanding of its full dermatologic impact.1 Such efforts would refine screening strategies and improve holistic care for obese individuals across diverse clinical settings.

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