Original Article

Oral Manifestations in Various Dermatological Diseases: A Cross-Sectional Study

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Abstract

Background: Oral mucosal lesions may accompany, precede, or provide diagnostic clues to dermatological disease, yet their clinical spectrum is often underrecognized. The objective is to evaluate the frequency, morphology, anatomical distribution, and associated factors of oral manifestations among patients with dermatological disorders. **Material and Methods:** This hospital-based cross-sectional study included 72 patients with dermatological disease and associated oral lesions. Demographic and clinical data were recorded, and all participants underwent structured cutaneous and oral examination. Diagnoses were based on clinical findings, with histopathological confirmation when indicated. **Results:** The mean age was 34.51 ± 16.29 years, and 51.4% were female. Lichen planus was the most frequent diagnosis (15.3%), followed by pemphigus vulgaris (11.1%), oral candidiasis (9.7%), lip vitiligo (9.7%), and discoid lupus erythematosus (8.3%). Pigmentary change (41.7%), plaque (30.6%), crusting (29.2%), and erosion (26.4%) were the predominant morphologies. The lips were most commonly involved (56.9%), followed by the buccal mucosa (33.3%) and tongue (18.1%). Diagnostic categories differed significantly by age (p=0.001) but not by sex. **Conclusion:** Oral manifestations in dermatological disease are diverse and clinically informative. Routine oral examination may facilitate earlier diagnosis and appropriate multidisciplinary management.

Keywords: oral manifestations; dermatological diseases; oral mucosa; lichen planus; pemphigus vulgaris.

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Introduction

The oral mucosa is closely related to the skin in its epithelial structure and immunological function, and many dermatological disorders may therefore involve both sites. Oral lesions may occur as an extension of an established cutaneous disease, precede the appearance of skin findings, reflect systemic inflammation or infection, or arise secondary to medications and immunosuppressive treatment. Their clinical presentations range from asymptomatic pigmentary or keratotic changes to painful erosions, ulcers, vesicles, plaques, and crusting that can impair eating, speaking, and oral hygiene. Recognition of these manifestations is consequently important not only for symptom control but also for early diagnosis of potentially serious mucocutaneous disease.

The reported frequency and spectrum of oral involvement among dermatology patients vary substantially across populations and clinical settings. In a Sudanese dermatology clinic, oral mucosal lesions were common and were associated with demographic, systemic, and behavioural factors.[1] A Brazilian cross-sectional study likewise demonstrated that dermatological diseases may produce diverse oral lesions whose morphology and anatomical distribution provide useful diagnostic information.[2] In a large South Indian series of 3,500 dermatology patients, oral lesions were relatively infrequent overall but included clinically important immune-mediated, infectious, pigmentary, and drug-related conditions.[3] Such variability may reflect differences in referral patterns, age distribution, underlying diseases, medication exposure, local habits, diagnostic criteria, and whether oral examination is performed routinely or only when symptoms are reported.

Several dermatological diseases have characteristic or diagnostically informative oral presentations. Oral lichen planus is a chronic immune-mediated disorder with reticular, plaque-like, atrophic, erosive, and ulcerative forms, most commonly affecting the buccal mucosa and tongue. Persistent erosive or erythematous disease is clinically important because of its chronicity, symptomatic burden, and recognized malignant potential, necessitating accurate diagnosis and long-term surveillance.[4] Pemphigus vulgaris is another important mucocutaneous disorder in which fragile blisters rapidly rupture

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to form painful erosions. Oral lesions may precede cutaneous involvement and can therefore provide an early clue to diagnosis before more extensive disease develops.[5] Oral findings also occur in connective-tissue, infectious, and hypersensitivity disorders. Lupus erythematosus may produce ulcers, erythematous or keratotic plaques, pigmentary changes, cheilitis, and salivary dysfunction; these features may correlate with systemic activity and contribute to impaired oral health.[6] Oral candidiasis represents an opportunistic shift of commensal Candida species toward pathogenic overgrowth and may present as removable white plaques, erythema, angular cheilitis, or chronic hyperplastic lesions, particularly in patients with immune dysfunction, diabetes, antibiotic exposure, or corticosteroid use.[7] Erythema multiforme may produce abrupt, painful oral erosions, haemorrhagic bullae, and characteristic crusting of the lips, sometimes with minimal cutaneous disease.[8] Similarly, Stevens–Johnson syndrome and toxic epidermal necrolysis are severe mucocutaneous reactions in which extensive oral ulceration and crusting may be prominent and can compromise hydration, nutrition, and airway-related care.[9]

Despite their clinical importance, oral lesions may be overlooked during routine dermatological assessment, especially when patients present primarily with cutaneous complaints or when lesions are asymptomatic. Overlapping morphologies also create diagnostic difficulty: erosions may occur in autoimmune blistering disease, erythema multiforme, drug reactions, and lupus, while plaques and pigmentary changes may represent inflammatory, infectious, or benign conditions. A structured examination of lesion morphology, colour, surface characteristics, anatomical distribution, associated symptoms, duration, medication exposure, and potential triggers can therefore improve diagnostic precision and identify cases requiring biopsy or multidisciplinary evaluation.

Regional data describing the complete spectrum of oral manifestations among dermatology patients remain limited, particularly in northeastern India. Characterizing these patterns is relevant because disease prevalence, environmental exposure, medication use, access to care, and health-seeking behaviour may differ across populations. The present study was therefore undertaken to determine the relative frequency and clinical spectrum of oral manifestations among patients with dermatological diseases attending a tertiary-care dermatology department. It further examined their distribution according to age and sex, lesion morphology, anatomical site, symptom duration, and documented triggering or risk factors. By providing a structured clinic-based profile of oral involvement, the study aims to support earlier recognition, more comprehensive mucocutaneous examination, and closer collaboration between dermatologists, oral physicians, dentists, and pathologists.

Materials and Methods

Study design and setting: A hospital-based cross-sectional observational study was conducted in the outpatient Department of Dermatology, Venereology and Leprosy, Jorhat Medical College and Hospital, Jorhat, Assam, from November 2024 to October 2025. The study evaluated the frequency and clinical pattern of oral mucosal manifestations among patients with dermatological diseases and examined their distribution according to age, sex, clinical presentation, and anatomical site.

Study participants: Patients attending the dermatology outpatient department with a dermatological disease and an associated oral lesion were assessed for eligibility. Patients of all ages and either sex who provided informed consent were included. For participants unable to provide consent, consent was obtained from a parent or legally authorized representative. Patients with marked staining of the oral mucosa or teeth that interfered with examination, restricted mouth opening precluding adequate oral evaluation, or unwillingness to participate were excluded. A total of 72 eligible patients were enrolled during the study period.

Data collection and clinical assessment: Data were collected using a predesigned structured proforma. Information recorded included age, sex, occupation, presenting symptoms, symptom duration, medical and dermatological history, medication exposure, personal habits, and potential triggering or risk factors.

All participants underwent a complete cutaneous and mucosal examination. The oral cavity was examined using visual inspection and palpation in accordance with World Health Organization recommendations for oral mucosal field assessment. Examination was performed under adequate illumination using sterile gauze and a mouth mirror; dentures, when present, were removed before evaluation.

Oral lesions were assessed for morphology, colour, surface characteristics, anatomical location, number, and associated symptoms. The recorded clinical morphologies included pigmentary changes, plaques, crusting, erosions, erythema, white lesions, patches, vesicles, ulcers, fissures, papules, and other relevant findings. Anatomical sites included the lips, buccal mucosa, tongue, hard and soft palate, gingiva, angle of the mouth, perioral region, and other involved oral sites.

More than one morphology, anatomical site, or triggering factor could be recorded for an individual participant. These variables were therefore treated as multiple-response data.

Diagnostic classification: Clinical diagnoses were established from the combined dermatological and oral examination findings using accepted clinical criteria for oral mucosal lesions. Where the clinical diagnosis was uncertain or histopathological confirmation was clinically indicated, a punch biopsy was performed and reviewed by a pathologist. Clinical photographs were obtained when appropriate.

The principal diagnostic categories included lichen planus, pemphigus vulgaris, oral candidiasis, lip vitiligo, discoid lupus erythematosus, herpes labialis, aphthous ulceration, erythema multiforme, cheilitis, fixed drug eruption, Stevens–Johnson syndrome/toxic epidermal necrolysis, perioral dermatitis, and other less frequent mucocutaneous disorders.

Outcome measures: The primary outcomes were the relative frequency and clinical spectrum of oral mucosal manifestations among the included patients. Secondary outcomes were the distribution of clinical diagnoses according to age and sex and

the patterns of lesion morphology, anatomical involvement, symptom duration, and documented triggering or risk factors.

Statistical analysis: Data were analyzed using IBM SPSS Statistics version 23.0. Continuous variables were summarized as mean ± standard deviation and, where appropriate, as median with interquartile range and range. Categorical variables were reported as n (%).

Morphology, anatomical site, and triggering or risk factors were analyzed as multiple-response variables; consequently, the corresponding percentages were not required to total 100%. Symptom duration was analyzed using available records with interpretable duration data.

Age distributions across clinical diagnostic categories were compared using the Kruskal–Wallis test because of unequal group sizes and non-normal distributions within several diagnostic categories. The association between sex and clinical diagnosis was initially assessed using Pearson's chi-square statistic. Because of sparse expected cell frequencies, statistical significance was determined using the Fisher–Freeman–Halton exact test with Monte Carlo estimation. All tests were two-sided, and a p value <0.05 was considered statistically significant.

Ethical considerations: The study was conducted after approval from the Institutional Ethics Committee of Jorhat Medical College and Hospital. Written informed consent was obtained from all adult participants and from parents or legally authorized representatives for minors. Participant confidentiality was maintained throughout data collection, analysis, and reporting.

Results

A total of 72 patients with dermatological diseases and associated oral manifestations were included. The mean age was 34.51 ± 16.29 years (range, 2–75 years), and 52 (72.2%) participants were aged 14–50 years. The study population included 37 (51.4%) females and 35 (48.6%) males [Table 1].

Table 1: Demographic characteristics of the study population (N = 72)

Characteristic	Category	Value
Age, years	Mean ± SD	34.51 ± 16.29
	Median (IQR)	33.5 (23–45)
	Range	2–75
Age group, years	≤13	6 (8.3%)
	14–30	26 (36.1%)
	31–50	26 (36.1%)
	51–70	12 (16.7%)
	>70	2 (2.8%)
Sex	Female	37 (51.4%)
	Male	35 (48.6%)

Spectrum of clinical diagnoses: Lichen planus was the most frequent diagnosis, occurring in 11 (15.3%) patients, followed by pemphigus vulgaris in 8 (11.1%). Oral candidiasis and lip vitiligo were each identified in 7 (9.7%), and discoid lupus erythematosus in 6 (8.3%). Age distributions differed significantly across diagnostic categories (Kruskal–Wallis H = 37.08, df = 15, p = 0.001), whereas the distribution by sex was not statistically significant (Pearson χ^2 = 18.34, df = 15; Monte Carlo exact p = 0.231) [Table 2].

Table 2: Clinical diagnoses according to age and sex (N = 72)

Clinical diagnosis	n (%)	Age, median (IQR), years	Female, n (%)	Male, n (%)
Lichen planus	11 (15.3%)	34 (24.5–50.5)	5 (45.5%)	6 (54.5%)
Pemphigus vulgaris	8 (11.1%)	41.5 (38–45.5)	2 (25.0%)	6 (75.0%)
Oral candidiasis	7 (9.7%)	45 (33.5–51)	5 (71.4%)	2 (28.6%)
Lip vitiligo	7 (9.7%)	27 (23–29.5)	4 (57.1%)	3 (42.9%)
Discoid lupus erythematosus	6 (8.3%)	49 (39.75–53.75)	3 (50.0%)	3 (50.0%)
Herpes labialis	5 (6.9%)	29 (25–34)	3 (60.0%)	2 (40.0%)
Aphthous ulcer	4 (5.6%)	20.5 (17.75–23.5)	0 (0.0%)	4 (100.0%)
Cheilitis	4 (5.6%)	26 (25–30.75)	2 (50.0%)	2 (50.0%)
SJS/TEN	4 (5.6%)	25.5 (20.25–32.25)	2 (50.0%)	2 (50.0%)
Fixed drug eruption	3 (4.2%)	52 (39.5–52)	0 (0.0%)	3 (100.0%)
Perioral dermatitis	3 (4.2%)	18 (12.5–19.5)	3 (100.0%)	0 (0.0%)
Bullous pemphigoid	3 (4.2%)	65 (61.5–69)	2 (66.7%)	1 (33.3%)
Erythema multiforme	3 (4.2%)	23 (14.5–32.5)	2 (66.7%)	1 (33.3%)
Hand-foot-and-mouth disease	2 (2.8%)	2.5 (2.25–2.75)	2 (100.0%)	0 (0.0%)
Herpes zoster	1 (1.4%)	39	1 (100.0%)	0 (0.0%)
Fordyce spots	1 (1.4%)	31	1 (100.0%)	0 (0.0%)

Age comparison: Kruskal–Wallis H = 37.08, df = 15, p = 0.001. Sex distribution: Pearson χ^2 = 18.34, df = 15; Fisher–Freeman–Halton Monte Carlo exact p = 0.231. SJS/TEN, Stevens–Johnson syndrome/toxic epidermal necrolysis.

Clinical morphology and anatomical distribution: The predominant oral lesion patterns were pigmentary change in 30 (41.7%), plaque in 22 (30.6%), crusting in 21 (29.2%), and erosion in 19 (26.4%) patients. The lip was the most frequently involved site, affecting 41 (56.9%) patients, followed by the buccal mucosa in 24 (33.3%) and tongue in

13 (18.1%) [Tables 3 and 4; Figure 2].

Table 3: Oral lesion morphologies (multiple-response analysis; N = 72)

Morphology	n (%)
Pigmentary change	30 (41.7%)
Plaque	22 (30.6%)
Crust/crusting	21 (29.2%)
Erosion	19 (26.4%)
Erythema	15 (20.8%)
White/whitish lesion	12 (16.7%)
Patch	8 (11.1%)
Vesicle	8 (11.1%)
Violaceous change	8 (11.1%)
Macule	7 (9.7%)
Fissure/fissuring	6 (8.3%)
Scaling/scaly	6 (8.3%)
Ulcer	6 (8.3%)
Haemorrhagic change	5 (6.9%)
Papule	2 (2.8%)

Participants could have more than one morphology; percentages therefore do not sum to 100%.

Table 4: Anatomical sites involved (multiple-response analysis; N = 72)

Anatomical site	n (%)
Lip	41 (56.9%)
Buccal mucosa	24 (33.3%)
Tongue	13 (18.1%)
Hard palate	6 (8.3%)
Angle of mouth	5 (6.9%)
Perioral area	2 (2.8%)
Soft palate	2 (2.8%)
Gingiva	1 (1.4%)
Vermilion border	1 (1.4%)

Participants could have more than one anatomical site involved; percentages therefore do not sum to 100%.

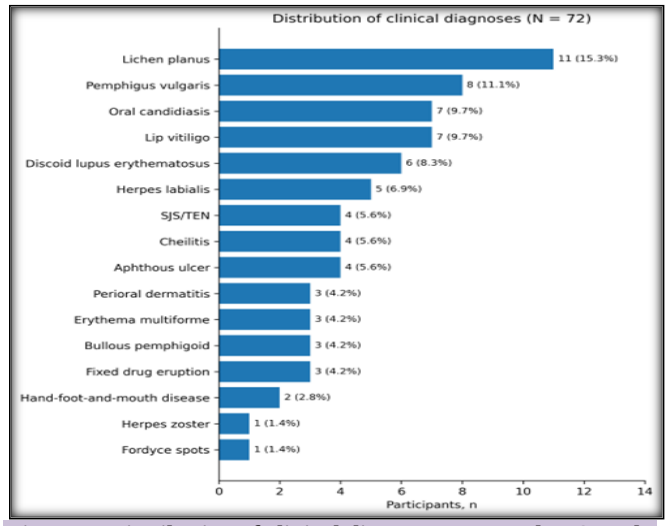

Figure 1: Distribution of clinical diagnoses among the 72 study participants. SJS/TEN, Stevens–Johnson syndrome/toxic epidermal necrolysis.

Symptom duration and associated factors: Symptom-duration data were available for 66 participants. Of these, 39 (59.1%) had symptoms for 1 month or less and 17 (25.8%) for more than 1–6 months. No triggering or risk factor was documented in 37 (51.4%) participants. The most frequently recorded factors were fever in 13 (18.1%), drug or medication exposure in 9 (12.5%), and stress in 5 (6.9%) [Table 5].

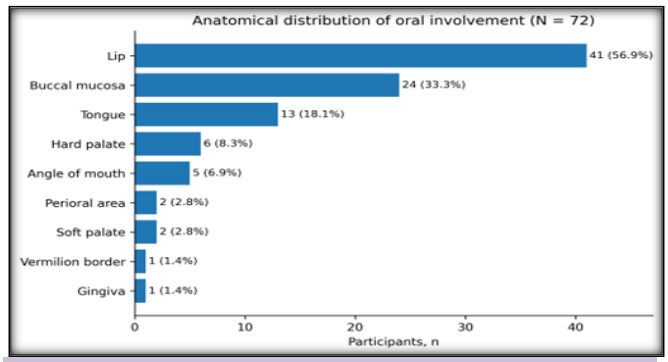

Figure 2: Anatomical distribution of oral involvement. Multiple sites could be recorded for an individual participant.

Table 5: Symptom duration and documented triggering or risk factors

Variable	n (%)
Duration of symptoms (n = 66)	
≤1 month	39 (59.1%)

>1–6 months	17 (25.8%)
>6–12 months	3 (4.5%)
>12 months	7 (10.6%)
Documented triggering/risk factors (N = 72)	
No documented trigger/risk factor	37 (51.4%)
Fever	13 (18.1%)
Drug/medication exposure	9 (12.5%)
Stress	5 (6.9%)
Sun exposure/photosensitivity	3 (4.2%)
Tobacco use	2 (2.8%)
Atopic dermatitis	1 (1.4%)
Dental filling/procedure	1 (1.4%)
Diabetes mellitus	1 (1.4%)
Spicy food	1 (1.4%)
Topical corticosteroid use	1 (1.4%)

Triggering and risk factors were analyzed as multiple-response variables; percentages may exceed 100%.

Discussion

This hospital-based study demonstrates a broad spectrum of oral manifestations among patients with dermatological disease. Lichen planus was the most frequent diagnosis, followed by pemphigus vulgaris, oral candidiasis, lip vitiligo, and discoid lupus erythematosus. Pigmentary change, plaques, crusting, and erosions were the predominant morphologies, while the lips, buccal mucosa, and tongue were the most commonly involved sites. Most participants were aged 14–50 years, diagnostic categories differed significantly by age, and no significant association with sex was observed. These findings emphasize that oral examination can reveal clinically informative manifestations across inflammatory, autoimmune, infectious, pigmentary, and drug-related disorders.

The demographic profile was broadly comparable to that reported by Mandadi et al., whose dermatology outpatient study found a mean patient age of 38.44 ± 17.30 years, predominance of the 31–60-year age group, and a slight female preponderance.[10] Their overall prevalence of oral mucosal lesions was 1.04%; notably, 82% of affected patients had presented primarily with skin complaints, and their oral lesions were detected incidentally. Specific mucocutaneous diseases accounted for 44% of cases, with vitiligo, lichen planus, and pemphigus vulgaris among the leading diagnoses. Although our study enrolled only patients with both dermatological disease and oral involvement and therefore cannot estimate prevalence among all dermatology attendees, the similar age distribution and diagnostic spectrum support routine oral examination even when oral symptoms are not the presenting complaint.

The predominance of lichen planus and pemphigus vulgaris in our cohort is also consistent with the pattern reported by Ramírez-Amador et al. In their dermatology-clinic population, pemphigus vulgaris accounted for 18.3% of oral conditions, while lichen planus and candidiasis each accounted for 8.3%, and recurrent aphthous ulceration for 6.7%.[11] Their study estimated an oral-condition frequency of approximately 2.8% among dermatology attendees and showed that immune-mediated and infectious disorders formed a substantial component of the oral disease burden. In the present study, lichen planus was more frequent than pemphigus vulgaris, while oral candidiasis and aphthous ulceration occupied similar but lower positions. These differences may reflect variation in referral pathways, ethnicity, case definitions, and whether patients were recruited prospectively from all dermatology attendees or selected after oral lesions had already been identified.

Thete et al. similarly documented considerable diagnostic diversity among dermatology patients with oral lesions.[12] Their series included immune-mediated disorders, infections, pigmentary conditions, and hypersensitivity reactions; lichen planus was among the prominent diagnoses, erythema multiforme accounted for 2.58% of cases, and lip involvement was specifically highlighted in patients with erythema multiforme. The investigators also found a significant association between dermatological diagnosis and oral manifestation, underscoring the value of oral morphology in narrowing the differential diagnosis. Our findings extend this observation by showing that pigmentary change was the most common morphology overall, followed by plaques, crusting, and erosions. This wider morphological distribution reflects the contribution of lip vitiligo, discoid lupus erythematosus, herpes labialis, drug reactions, and autoimmune blistering disease within a single clinical cohort.

A contrasting prevalence pattern was reported by Keswani et al., who found at least one oral mucosal lesion in 11.8% of dermatologically diseased patients.[13] In that study, males constituted 58.6% of affected patients, oral lesions were significantly more frequent in men than women, aphthous ulceration was the leading diagnosis at 3.4%, and oral lichen planus followed at 1.8%. By comparison, our cohort showed nearly equal sex distribution, no statistically significant association between diagnosis and sex, and a greater contribution from lichen planus, pemphigus vulgaris, candidiasis, and pigmentary disorders. The contrast suggests that the apparent disease spectrum is highly sensitive to sampling strategy. Studies screening all dermatology attendees may identify more common incidental lesions, whereas cohorts restricted to clinically relevant mucocutaneous disease may be enriched for autoimmune and inflammatory disorders.

Pemphigus vulgaris was the second most frequent diagnosis in the current study and occurred predominantly in middle-aged participants. Suliman et al. provided detailed clinicopathological evidence of the importance of oral involvement in pemphigus.[14] Pemphigus vulgaris constituted

95.4% of pemphigus cases in their series, oral mucosal involvement was present in 90.4%, and the mouth was the initial disease site in 50% of patients who developed both oral and cutaneous lesions. Bilateral buccal mucosa and the hard palate were the most frequently affected sites, erosions and ulcers predominated, and 43.8% of symptomatic patients reported severe pain. Histologically, suprabasal clefting was identified in 10 of 11 biopsies, while IgG and C3 were detected intercellularly in all specimens examined. In our study, pemphigus vulgaris represented 11.1% of diagnoses and erosions were present in approximately one-quarter of the overall cohort. Although disease-specific oral sites were not analyzed separately, the high frequency of buccal mucosal involvement supports careful inspection for fragile erosions that may provide an early clue to pemphigus.

The importance of such early recognition is reinforced by the systematic review and meta-analysis of Batistella et al., which included 40 studies in the qualitative synthesis and 38 in the quantitative analysis.[15] The pooled prevalence of oral lesions occurring alone or with other mucocutaneous lesions in pemphigus vulgaris was 90.3%, while exclusive oral involvement occurred in 50.8%. The oral mucosa was also the most common site of disease onset. Although the included studies generally had a low risk of bias, the certainty of evidence was judged very low because of heterogeneity and limitations in the underlying observational literature. These findings indicate that an oral presentation should not be regarded as unusual or secondary in pemphigus vulgaris. In dermatology practice, persistent multifocal erosions—particularly when cutaneous lesions are absent or limited—should prompt biopsy and immunopathological evaluation.

Discoid lupus erythematosus accounted for 8.3% of diagnoses in the present cohort and contributed to the observed mixture of pigmentary change, plaques, erythema, erosion, and lip involvement. Ranginwala et al. described 21 patients with oral discoid lupus erythematosus and found that 90.47% had concurrent oral and cutaneous lesions, whereas 9.52% had oral disease alone.[16] The labial mucosa was involved in 76.19%, the vermilion border in 71.42%, and the buccal mucosa in 42.85%. Central erythema was present in 52.4%, white spots in 28.6%, and ulceration in 19%. Their findings closely parallel the prominence of lip involvement and pigmentary or plaque-like morphology in our study. They also highlight the clinical overlap between oral lupus and oral lichen planus, supporting histopathological confirmation when morphology is atypical, persistent, or diagnostically ambiguous.

The lips were the most frequently involved site in our cohort, followed by the buccal mucosa and tongue. This distribution reflects the combined contribution of lip vitiligo, herpes labialis, cheilitis, erythema multiforme, Stevens–Johnson syndrome/toxic epidermal necrolysis, fixed drug eruption, and discoid lupus erythematosus. The predominance of pigmentary change is similarly explained by the inclusion of lip vitiligo, lichen planus, and lupus-related dyspigmentation. In contrast, plaques and erosions were more characteristic of candidiasis, lichen planus, pemphigus vulgaris, and severe drug reactions. Recording morphology and site as multiple-response variables was therefore appropriate because many mucocutaneous disorders produce several simultaneous lesion types across more than one oral location.

More than half of participants had symptoms lasting one month or less, suggesting that acute infections, drug reactions, erythema multiforme, herpes-associated disease, and acute ulcerative conditions contributed substantially to the cohort. However, chronic disorders such as lichen planus, pemphigus, lupus, vitiligo, and recurrent candidiasis remained important. No trigger was documented in approximately half of patients; fever, medication exposure, and stress were the most frequently recorded factors among the remainder. These associations should be interpreted descriptively because exposures were based on clinical history and were not evaluated against an unaffected comparison group.

The principal strength of this study is its structured assessment of diagnosis, morphology, anatomical site, symptom duration, and associated factors across a heterogeneous dermatological population. Oral examination followed a standardized field-assessment approach, and histopathological confirmation was obtained when clinically indicated. The use of multiple-response analysis also preserved the complexity of lesions involving several sites or morphologies.

Several limitations should be acknowledged. The study was conducted at a single tertiary-care center and included only patients already identified as having both dermatological disease and an oral lesion; consequently, it cannot estimate the prevalence of oral manifestations among all dermatology attendees. The modest sample size produced sparse diagnostic subgroups and limited multivariable analysis. Disease-specific morphology and site distributions were not presented, and biopsy was performed selectively rather than uniformly. Potential risk factors were based on documented history, and six participants lacked interpretable symptom-duration data. Referral and selection bias may also have increased the relative frequency of clinically conspicuous or severe mucocutaneous disorders.

Conclusion

Oral manifestations among dermatology patients were clinically diverse, with lichen planus, pemphigus vulgaris, candidiasis, lip vitiligo, and discoid lupus erythematosus accounting for much of the observed burden. Pigmentary change, plaques, crusting, and erosions predominated, and the lips and buccal mucosa were the principal sites of involvement. A systematic oral examination can identify lesions that refine diagnosis, reveal early mucocutaneous disease, and prompt timely biopsy or multidisciplinary care.

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Conflicts of interest

There are no conflicts of interest.

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