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ORIGINAL ARTICLE

Spectrum and clinical burden of Unrecognized Dermatologic Diseases in hospitalized adults: A single-centre cross-sectional study

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Abstract

Dermatological problems are commonly encountered in society. Dermatological examination is based on inspection and palpation. The aim of this study was to conduct a comprehensive dermatological examination of adult patients hospitalized at our university hospital and to identify the dermatological complaints and diseases encountered. This single-center, prospective, cross-sectional study included 112 adult patients who were hospitalized at our hospital and met the eligibility criteria. Systematic dermatological examinations of the entire body and mucosa were performed in a suitable examination environment. Diagnoses and/or definitions corresponding to the findings obtained from the complaints and dermatological examination of all participants were categorized. All 112 patients received at least 1 and at most 7 diagnoses, with a median of 5 diagnoses. The most common dermatological problems in our patients, which did not require treatment unless symptomatic, were seborrheic dermatitis, xerosis cutis, callus/hyperkeratosis, cheilitis, rosacea, and telogen effluvium, with frequencies of 6-61%, respectively. The problems that did not require treatment unless requested by the patient were solar lentigo, androgenetic alopecia, seborrheic keratosis, cherry angioma, nevi, and skin tags, with frequencies of 10-31%, respectively. Our study revealed that many dermatological issues, ranging from SCC to scabies, from candida stomatitis to tinea pedis and intertrigo, were not noticed during hospitalization in the ward. Inspection is an integral part of routine physical examinations, and we believe that there is a lack of practice in this area, and collaboration with dermatology should be improved.

Introduction

Dermatological problems are frequently encountered in the society. However, when such problems cause anxiety or subjective deterioration in quality of life, they become an outpatient clinic referral. Lowell et al. reported that 36.5% of patients applying a primary care physician had at least one skin problem and 58.7% of patients with skin disease had dermatological problems as their main complaint [1]. The effect of dermatological problems on the patient's quality of life varies according to their severity and nature. Problems that do not impair the quality of life much may be neglected by patients and/or physicians.

Physical examination consists of four components: Inspection, palpation, percussion, auscultation. Dermatological examination is based on inspection and palpation and provides important clues not only in dermatology but also in all medical fields. However, due to the time-consuming and sophisticated aspects of the dermatological examination, it cannot be performed optimally and is often neglected. We

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believe that routine complete dermatological examination in inpatients may provide a very important chance to detect skin cancers, especially melanoma. Kingsley et al. reported the incidental rate of encountering cutaneous malignancy as 6.9% if a complete dermatological examination is performed in routine dermatology consultations [2]. In addition, due to the increasing number of scabies cases in our country recently, we experience that patients with a diagnosis of scabies accompanying the diagnosis of hospitalization are consulted and hospital staff are infected [3].

Although inpatients in other clinics and outpatients are frequently requested for consultation in dermatology practice, we are concerned that there may be many problems, diseases and malignancies that may be overlooked. Studies in the literature on this subject have focused on retrospective evaluation of outpatient or inpatient consultations [4-8]. There are almost no studies in which ward patients were prospectively evaluated with a complete dermatological examination [9]. In this study, it was aimed to perform a complete dermatological examination of adult patients hospitalized in internal and surgical wards and intensive care units in our university and to determine the dermatological complaints, problems and diseases encountered.

Materials and Methods

This single-centre, cross-sectional study aimed to determine the prevalence and spectrum of dermatological diseases among adult inpatients at Afyonkarahisar Health Sciences University (AFSU) Faculty of Medicine Hospital, to identify dermatological diagnoses that are overlooked in non-dermatology inpatient settings, and to evaluate the extent to which dermatological examination is neglected in routine hospital care. The broader objective was to draw clinically meaningful inferences regarding the need for systematic integration of dermatological assessment into standard inpatient practice.

Ethics committee approval was obtained from Afyonkarahisar Health Sciences University Non-Clinical Ethics Committee (Date: 15.12.2023; Decision No: 2023/594), and the study was conducted in accordance with the Declaration of Helsinki and current Good Clinical Practice Guidelines. Written informed consent was obtained from all participants. Approvals for patient screening were obtained from the Departments of Internal Medicine, Chest Diseases, Gynaecology and Obstetrics, and Anaesthesiology.

Patients aged ≥18 years who were actively hospitalised in approved adult wards and intensive care units and who provided informed consent were included. Patients in the emergency, dermatology, psychiatry, or observation units, those unable to consent, those under contact isolation, and those for whom the ward physician deemed examination inadvisable were excluded.

Systematic full-body and mucosal dermatological examinations were performed by a dermatology resident in a private setting, with a supervised third-year medical student assisting in data collection. Dermoscopy was applied when clinically indicated. No additional investigations were requested. Examinations were completed within one week per ward, with one patient recorded per bed.

Identified conditions were managed according to clinical urgency: formal consultation was arranged for urgent conditions (e.g. scabies, herpes zoster, drug reactions, suspected melanoma or squamous cell carcinoma (SCC)); outpatient referral after discharge was recommended for non-urgent findings; and personal follow-up was advised in all other cases.

Diagnoses were standardised using the classification system in Algorithmic Diagnosis in Dermatology [10] and subsequently recategorised according to the disease taxonomy of Bolognia et al. [11], without sub-classification. Pruritus without an identifiable cause was recorded as idiopathic pruritus when supported by history, or as 'examination and observation of undetermined cause' when further

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investigation was warranted. When a pruritus-associated dermatosis was identified, both the diagnosis and the symptom were recorded separately.

Statistical analysis

All procedures were performed using the Statistical Package for Social Sciences software (SPSS Inc., Chicago, IL, USA, v21.0). Normality distribution of numerical variables was checked by Shapiro-Wilk test. Results are presented as median (interquartile range, IQ) and number (percentage) in frequency tables. Pearson chi-square and Fisher-exact tests were used for categorical variables when appropriate. Since the data were not normally distributed, Mann-Whitney U test was preferred for independent two-group analyses. Two-way p value <0.05 was considered statistically significant.

Results

General findings

Various descriptive characteristics of the study group are presented in Table 1. Although a complete dermatological examination was optimally performed in 59.2% (n=67) of the patients, genital examination consent could not be obtained in 29.5% (n=33), and evaluation was suboptimal due to clinical or environmental constraints in 10.7% (n=12).

Table 1. Demographic and clinical characteristics of study participants (n=112).

Parameter	Category	n (%)
Sex	Female / Male	59 (52.7%) / 53 (47.3%)
Age (years) – Median (IQR): 59 (35), range 18–91	18–49	40 (35.7%)
	50–64	28 (25%)
	≥65	44 (39.3%)
Department	Internal Medicine / Chest Diseases	66 (58.9%)
	Anaesthesia / Gynaecology	46 (41.1%)
Setting	Ward	83 (74.1%)
	Intensive Care Unit	29 (25.9%)
Hospitalization duration – Median days (IQR)	Overall	3 (7)
Multisystemic disease		73 (65.2%)
Multidisciplinary approach required		41 (36.6%)
Fitzpatrick Skin Type	Type I–II	51 (45.5%)
	Type III–IV	61 (54.5%)
Glogau Photoaging Scale	Type 1–2	40 (35.7%)
	Type 3–4	72 (64.3%)
Sunscreen use	Never / Rarely	102 (91%)
	Sometimes / Frequently / Always	13 (11.6%)
BMI – Median (IQR)		26.8 (7.1)
Completeness of examination	Optimal	67 (59.2%)
	Suboptimal (no genital exam)	33 (29.5%)

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	Suboptimal (clinical/environmental)	12 (10.7%)

IQR: Interquartile range; BMI: Body mass index. Glogau photoaging scale: Type 1 = mild; Type 4 = severe.

The distribution of the main dermatological complaints by age and sex is presented in Table 2. Xerosis cutis was the most prevalent complaint, reported by 43.8% (n=49) of patients, and was significantly more common in those aged ≥65 years (p=0.001). A total of 62.5% of patients reported at least one dermatological complaint, yet most had not disclosed these to their attending physician, suggesting a tendency to disregard cutaneous symptoms in the context of concurrent systemic illness.

Table 2. Distribution of main dermatological complaints by sex and age group.

Complaint	Total n (%)	Female	Male	*p*-value	Age		*p*-value
					<65	≥65	
At least 1 complaint	70 (62.5%)	–	–	–	–	–	–
Generalised dryness (xerosis)	49 (43.8%)	23 (39.0%)	26 (49.1%)	0.283	21 (30.9%)	28 (63.6%)	**0.001***
Erythema in sun-exposed areas	25 (22.3%)	12 (20.3%)	13 (24.5%)	0.595	16 (23.5%)	9 (20.5%)	0.703
Generalised pruritus	13 (11.6%)	7 (11.9%)	6 (11.3%)	0.929	5 (7.4%)	8 (18.2%)	0.081
Erythema in fold areas	10 (8.9%)	7 (11.9%)	3 (5.7%)	0.328	6 (8.8%)	4 (9.1%)	1.000
Regional dysesthesia/burning	8 (7.1%)	4 (6.8%)	4 (7.5%)	1.000	5 (7.4%)	3 (6.8%)	1.000
Increased sweating	6 (5.4%)	–	–	–	–	–	–
Generalised rash	4 (3.6%)	–	–	–	–	–	–

*Pearson chi-square and Fisher-exact tests were used. *p<0.05. Items with cell frequency <10 were not analysed separately. '–' indicates no statistical analysis performed.*

Regional examination findings, diagnoses, and management

The regional distribution of dermatological diagnoses, referral patterns, and treatment status is summarised in Table 3, which consolidates findings across all six examined body regions: scalp, face and neck, oral mucosa, trunk, extremities, and anogenital region. For each region, Table 3 reports the number of patients receiving at least one diagnosis, the total number of diagnoses recorded, the three most frequently identified conditions, the number of cases requiring immediate dermatological consultation, the number referred for elective outpatient evaluation, and the proportion of referred cases that were untreated at the time of examination. Detailed examination findings stratified by sex and age group, together with per-diagnosis management recommendations and treatment status, are provided in Supplementary Tables S1 through S6, corresponding to the scalp, face and neck, oral mucosa, trunk, extremities, and anogenital region, respectively.

Across all 112 participants, a total of 592 diagnoses were recorded, with every patient receiving between 1 and 7 diagnoses (median 5). At least one dermatological diagnosis was established in 100% of participants. Of all diagnostic conditions identified, 35 (6.0%) arising in 11 patients (9.8%) required immediate dermatological consultation, while 315 conditions were referred for elective outpatient evaluation. The overall untreated rate among conditions referred to dermatology exceeded 90% in most body regions, underscoring a substantial and previously unrecognised burden of dermatological disease in the hospitalised population.

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Table 3. Summary of dermatological diagnoses and management by body region (n=112).

Body Region	Pts with ≥1 Dx n (%)	Total Dx (n)	Most Frequent Diagnoses (top 3)	Immediate Consultation n	Referred to Outpatient n	Untreated (%)	Detailed Data
Scalp	79 (70.5%)	105	Seborrhoeic dermatitis (41.1%), Androgenetic alopecia (28.6%), Telogen effluvium (6.3%)	1	56	95.7%	Suppl. Table S1
Face & Neck	94 (83.9%)	151	Rosacea (22.3%), Solar lentigo (22.3%), Seborrhoeic dermatitis (19.6%)	2	75	96.3%	Suppl. Table S2
Oral Mucosa	55 (49.1%)	62	Cheilitis (23.2%), Candida stomatitis (18.9%), Glossitis (3.6%)	10	36	56.5%	Suppl. Table S3
Trunk	83 (74.1%)	119	Cherry angioma (19.6%), Seborrhoeic keratosis/solar lentigo (18.8%), Xerosis cutis (15.2%)	6	42	93.7%	Suppl. Table S4
Extremities	100 (89.3%)	141	Tinea pedis/unguium (58.9%), Callus/hyperkeratosis (30.4%), Xerosis cutis (11.6%)	11	98	90.8%	Suppl. Table S5
Anogenital Region*	14 (17.7%)	14	Erythema intertrigo (3.8%), Genital candidiasis (3.8%), Tinea cruris (2.5%)	5	8	69.2%	Suppl. Table S6
TOTAL	**112 (100%)**	**592**	**Median 5 diagnoses per patient (range 1–7)**	**35**	**315**	–	–

**Anogenital region examined in 79 patients (33 declined consent). Dx: diagnosis; Pts: patients. 'Untreated' refers to diseases referred to dermatology with no prior treatment. Total diagnoses (592) include all body regions combined.*

Conditions requiring immediate dermatological consultation (Table 4)

Cases requiring immediate dermatological consultation, identified across all body regions, are detailed in Table 4. A total of 35 diagnostic conditions in 11 patients (9.8%) were deemed to require urgent dermatological assessment during the course of hospitalisation. These conditions spanned all examined body regions and encompassed a broad clinical spectrum: from potentially malignant lesions (suspected SCC, dysplastic nevus) and systemic disease indicators (DLE, melanonychia striata), to active infections with public health implications (scabies, tinea corporis, candida stomatitis, genital candidiasis), drug reactions (maculopapular drug eruption), and conditions presenting with significant morbidity risk (pressure sores, stasis dermatitis, ingrown toenail with infection risk).

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A critical finding emerging from Table 4 is that the overwhelming majority of immediately consulted conditions — approximately 90.8% across all regions — were entirely untreated at the time of examination. This observation is particularly concerning for conditions such as candida stomatitis, where 16 patients were found to be under inadequate treatment despite the availability of effective antifungal therapy, and for tinea pedis in high-risk patients, where untreated disease directly increases the likelihood of limb-threatening cellulitis. The clinical rationale for each urgent referral is documented in Table 4, together with the action subsequently taken, providing a transparent record of the clinical decision-making process employed during examination.

Taken together, the findings from Tables 3 and 4 demonstrate that a systematic dermatological examination during hospitalisation — even when conducted as part of a research protocol rather than routine clinical practice — is capable of detecting a wide range of clinically significant conditions that would otherwise remain unrecognised. The fact that no single body region was free of conditions requiring immediate intervention underscores the necessity of a whole-body approach to dermatological assessment in the inpatient setting.

Table 4. Dermatological conditions requiring immediate consultation during hospitalization (n=35 conditions in 11 patients).

Body Region	Diagnosis	n	Clinical Rationale for Urgency	Prior Treatment Status	Action Taken
Scalp	Melanocytic nevus (atypical)	1	Dermoscopic features warranting biopsy evaluation	Untreated	Dermatology consult
Face & Neck	Squamous cell carcinoma (suspected)	1	Dermoscopic SCC pattern; biopsy performed	Untreated	Biopsy + consult
	Discoid lupus erythematosus (suspected)	1	Active scarring lesions; systemic workup needed	Untreated	Dermatology consult
Oral Mucosa	Cheilitis (severe)	4	Symptomatic; significant quality-of-life impact	Under-treated (n=4)	Treatment initiated
	Candida stomatitis	4	Active infection; immunocompromised context	Under-treated (n=4)	Antifungal treatment
	Glossitis	1	Nutritional deficiency suspected; systemic implications	Untreated	Consult + workup
	Oral aphthae	1	Recurrent/severe; systemic association possible	Untreated	Dermatology consult
Trunk	Dysplastic nevus	1	High-risk dermoscopic pattern	Untreated	Dermatology consult
	Maculopapular drug reaction	1	Active drug eruption; causative drug assessment required	Untreated	Drug review + consult
	Contact dermatitis	1	Active and unrecognised; allergen identification needed	Untreated	Dermatology consult
	Tinea corporis	1	Contagious; infection control risk in ward	Untreated	Antifungal treatment
	Scabies	1	Highly contagious; hospital staff protection required	Untreated	Isolation + treatment
Extremities	Tinea pedis/unguium	5	Diabetes/immunosuppression; cellulitis risk	Untreated (n=5)	Antifungal treatment
	Stasis dermatitis	2	Venous insufficiency complications; ulceration risk	Untreated	Dermatology consult

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	Pressure sores	1	Active tissue breakdown; wound care required	Untreated	Wound care consult
	Other dermatitis	1	Severe/uncontrolled; treatment required	Untreated	Dermatology consult
	Ingrown toenail	1	Pain + infection risk; procedural intervention needed	Untreated	Surgical consult
Anogenital	Erythema intertrigo	2	Secondary infection risk; intertriginous location	Untreated	Treatment initiated
	Genital candidiasis	3	Active infection requiring treatment	Untreated (n=2), partial (n=1)	Antifungal treatment
TOTAL	–	**35**	**6.0% of all diagnostic conditions (35/592)**	**90.8% untreated across all regions**	–

SCC: squamous cell carcinoma; DLE: discoid lupus erythematosus. All immediate consultations were initiated by the study dermatologist. 'Prior Treatment Status' refers to treatment received for the specific dermatological condition before examination.

Discussion

Our study, in which adult patients hospitalised in the inpatient wards of our hospital were systematically screened with a complete dermatological examination, clearly demonstrated that dermatological problems are both highly prevalent and largely unrecognised in the comorbid inpatient population. Lowell et al. reported that 36.5% of patients presenting to a primary care physician had at least one skin problem and that 58.7% had a dermatological problem as their main complaint [1]; the present study extends this observation to the inpatient setting, where every single participating patient received at least one dermatological diagnosis or description. Across 112 participants, a total of 592 diagnoses were recorded — a median of 5 diagnoses per patient. Although 62.5% of patients reported between 1 and 5 dermatological complaints, none had disclosed these to their attending physician, suggesting that cutaneous symptoms are systematically underreported in the context of concurrent systemic illness. When examined across body regions, dermatological diagnoses were established with frequencies ranging from 17.7% (anogenital region, among consenting patients) to 89.3% (extremities). The observation that approximately two-thirds of patients had multisystemic disease, one-third required a multidisciplinary approach, and one-quarter were admitted to intensive care may partially explain why cutaneous findings are overlooked during standard inpatient care.

The most frequently identified diagnoses that did not require treatment unless symptomatic were seborrhoeic dermatitis, xerosis cutis, callus/hyperkeratosis, cheilitis, rosacea, and telogen effluvium, with frequencies ranging from 6% to 61%. These conditions are among the most commonly encountered diagnoses in dermatology outpatient practice and have been reported with a frequency of up to 5% in all outpatient visits [12]. Similarly, conditions that did not require treatment unless specifically requested by the patient — including solar lentigo, androgenetic alopecia, seborrhoeic keratosis, cherry angioma, nevi, and skin tags — were identified with frequencies of 10–31%. The significant decline in outpatient visits for these diagnoses during the COVID-19 pandemic further corroborates that they do not substantially impair quality of life and are frequently disregarded by both patients and clinicians [12].

Photodermatoses — including rosacea, solar lentigo, seborrhoeic keratosis, actinic keratosis, and melasma — were identified with high frequency during face, neck, and trunk examination. Erythema in sun-exposed areas was reported as a complaint by 22.3% of patients, and 64.3% were classified as Glogau photoaging type 3 or 4. These findings are consistent with the observation that 82.1% of participants reported never using sunscreen, and a further 8.9% used it only rarely — together

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representing over 90% of the study population. This disproportionate burden of photoageing and sun-related pathology in a relatively young cohort (median age 59 years) underscores the inadequacy of photoprotection practices in this region and highlights a meaningful opportunity for preventive counselling during hospitalisation.

One of the most striking findings of this study — clearly demonstrated across all body regions in Tables 3 and 4 — is the profound treatment gap affecting the hospitalised dermatological patient. Among all conditions referred to dermatology, the untreated rate exceeded 90% in four of six examined body regions: scalp, face and neck, trunk and extremities. Even in the anogenital region, 69.2% of referred conditions were entirely untreated. These figures indicate that the dermatological burden identified in this study was not merely unnoticed but was also systematically unmanaged. The fact that patients had been under continuous medical and nursing supervision for a median of three days prior to examination — without any of these conditions being identified or treated — suggests a fundamental gap in the dermatological component of routine physical examination among non-dermatologist clinicians.

As detailed in Table 4, a total of 35 diagnostic conditions in 11 patients (9.8%) required immediate dermatological consultation, encompassing a broad clinical spectrum across all examined body regions: from potentially malignant lesions — including one case of suspected squamous cell carcinoma (SCC) confirmed by dermoscopy and biopsy, and one case of suspected discoid lupus erythematosus (DLE) — to active infections with nosocomial transmission risk, drug eruptions, and conditions with significant morbidity risk such as pressure sores and stasis dermatitis. Kingsley et al. reported an incidental cutaneous malignancy rate of 6.9% in routine dermatology consultations [2]; the identification of a suspected SCC in our cohort, which had not been recognised during standard ward care, reinforces the value of proactive dermatological screening in the inpatient setting. Critically, approximately 90% of conditions requiring immediate consultation were entirely untreated at the time of examination, confirming that urgency reflected complete absence of prior recognition rather than failed treatment.

Tinea pedis and/or tinea unguium was the single most prevalent diagnosis across the entire cohort, identified in 58.9% of patients. Despite this high prevalence, immediate consultation was requested in only 7.6% of these cases — specifically those with concurrent diabetes mellitus or immunosuppression — owing to the substantially elevated risk of secondary bacterial infection and cellulitis in these subgroups. The remainder were referred for elective outpatient evaluation. Notwithstanding this risk-stratified approach, tinea pedis constitutes a public health concern regardless of comorbidity status, as it is transmissible and predisposes even immunocompetent patients to cellulitis. The extremely low treatment rate (90.8% untreated among extremity referrals) and limited patient and physician awareness together suggest that the dermatological significance of fungal foot infections is systematically underestimated in the inpatient setting.

Immediate consultation was requested for more than 15% of oral mucosal conditions, including cheilitis and candida stomatitis — each occurring in approximately one-fifth of the study population. The high prevalence of these diagnoses is likely attributable to the inclusion of pulmonology and intensive care patients in the study group, populations at elevated risk for oral candidiasis due to inhaled corticosteroid use, broad-spectrum antibiotic exposure, and immunosuppression. A particularly alarming finding was the treatment status in this region: only 8.7% of referred oral mucosal conditions were receiving appropriate treatment, while 34.8% were under inadequate or incomplete treatment — the highest under-treatment rate of any examined body region, and substantially higher than the already concerning rates observed elsewhere. Among patients with candida stomatitis specifically, 16 were found to be under-treated despite the ready availability of effective antifungal therapy. These findings emphasise that physicians managing high-risk inpatients must take a more active role in the recognition and treatment of oral mucosal disease, and that closer interdisciplinary collaboration with dermatology in this context is warranted.

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Two specific findings from this study warrant particular attention as indicators of systemic disease and infection control risk, respectively. First, one patient with longitudinal melanonychia striata was identified and referred for systemic evaluation to exclude Addison's disease. While a definitive endocrinological diagnosis was not established within the scope of this study, this case illustrates a well-recognised principle: longitudinal nail pigmentation may represent the first — and sometimes the sole — visible sign of an underlying endocrinological disorder, and its recognition on routine inspection may substantially alter clinical management [13]. Routine examination of the nail apparatus, which is frequently omitted during standard physical assessment, may therefore yield diagnostically critical information. Second, one case of scabies was identified during trunk examination in a patient who had been under continuous medical and nursing observation without the diagnosis being recognised. Given the documented rise in scabies incidence across Europe and globally in recent decades [3], the detection of unrecognised scabies in the inpatient setting carries immediate infection control implications — necessitating patient isolation, contact tracing, and staff notification. The failure to diagnose this case during routine ward care highlights the vulnerability of the inpatient environment to nosocomial scabies transmission and underscores the clinical value of systematic dermatological inspection.

The anogenital region had the lowest overall diagnostic yield, with diagnoses established in only 17.7% of the 79 patients who consented to examination; 33 participants (29.5%) declined this component of the assessment. Despite this low prevalence, the proportion of identified conditions requiring immediate consultation was the highest of any body region: 35.7% (5 of 14 conditions), comprising erythema intertrigo (n=2) and genital candidiasis (n=3). Furthermore, 7.7% of referred anogenital conditions were under inappropriate treatment — the only region in which active mismanagement was documented alongside untreated cases. These findings indicate that while anogenital pathology is infrequent in the inpatient population, when present it is disproportionately likely to require urgent intervention. Patient reluctance to undergo genital examination is an acknowledged barrier; however, given the clinical significance of findings in this area, clinicians should be encouraged to incorporate anogenital assessment into routine comprehensive physical examination whenever clinically indicated and with appropriate consent.

The need for dermatoscopy was highest in the face and neck region (25.0%), while in all other body regions it remained below 7%. This distribution is clinically significant: it indicates that the majority of dermatological conditions identified across the body — particularly those of the scalp, trunk, extremities, and oral mucosa — are regional dermatoses amenable to clinical inspection and photodocumentation without requiring specialist equipment at the point of assessment. This characteristic of the dermatological burden identified in this study strengthens the case for teledermatological consultation as a practical and scalable adjunct to inpatient care. Teledermatology has demonstrated reliable diagnostic accuracy across a range of clinical settings [14,15], and its adoption in routine clinical pathways has expanded substantially in recent years [16]. In the context of this study — where a single structured examination yielded 592 diagnoses in 112 patients across non-specialised wards — teleconsultation platforms could enable rapid, cost-effective specialist review of the majority of identified conditions without necessitating in-person dermatology visits. We therefore anticipate that teledermatology will evolve from an alternative resource into a routine and integral component of inpatient dermatological assessment.

The most important limitations of this study are its single-centre design, relatively small sample size, and the fact that permission for systematic examination was obtained from only four clinical departments, precluding generalisability to surgical, orthopaedic, neurological, or other inpatient populations. Genital examination was declined by nearly 30% of patients, potentially underestimating pathology in the anogenital region. Nevertheless, the prospective, whole-body examination methodology employed in this study addresses a substantive gap in the existing literature, which has been dominated by retrospective analyses of outpatient visits and inpatient dermatology referrals [4–8].

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To our knowledge, only one other prospective study has examined dermatological conditions in hospitalised patients — conducted in a palliative care setting [9] — further highlighting the scarcity of prospective inpatient data. By systematically examining patients who had not been referred to dermatology, this study captures the silent dermatological burden that routine clinical care fails to detect — the conditions that, in the words of our original research question, whisper rather than declare themselves.

Conclusion

This study reveals that dermatological disease in hospitalised adults is prevalent, topographically diverse, overwhelmingly untreated, and largely invisible to non-dermatologist clinicians. The range of missed conditions — from squamous cell carcinoma and scabies to candida stomatitis, tinea pedis, and intertrigo — reflects not the rarity of these diagnoses but the absence of systematic dermatological assessment in standard inpatient care. Future studies with larger, multicentre cohorts encompassing a broader range of clinical specialties are warranted to further characterise this burden and to evaluate the impact of structured dermatological screening protocols on patient outcomes. Until such protocols are established, the integration of dermatological inspection into routine physical examination and the expansion of teledermatological consultation remain the most practical and immediately implementable steps toward addressing the hidden dermatological burden of the hospitalised patient.

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Conflict of interest

There is no conflict of interest.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

References

1. Lowell BA, Froelich CW, Federman DG, Kirsner RS. Dermatology in primary care: Prevalence and patient disposition. J Am Acad Dermatol. 2001;45(2):250-5. doi: 10.1067/mjd.2001.113313.
2. Kingsley-Loso JL, Grey KR, Hanson JL, Raju SI, Parks PR, Bershow AL, et al. Incidental lesions found in veterans referred to dermatology: The value of a dermatologic examination. J Am Acad Dermatol. 2015;72(4):651-5.e1. doi: 10.1016/j.jaad.2014.12.047.
3. Delaš Aždajić M, Bešlić I, Gašić A, Ferara N, Pedić L, Lugović-Mihić L. Increased scabies incidence at the beginning of the 21st century: What do reports from Europe and the world show? Life. 2022;12(10):1598. doi: 10.3390/life12101598.
4. Stern RS, Johnson ML, DeLozier J. Utilization of physician services for dermatologic complaints: The United States, 1974. Arch Dermatol. 1977;113(8):1062-6. doi: 10.1001/archderm.1977.01640200074008.

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5. Alamri A, Alshareef M, Aljoudi SB, Assaedi L, Alkassimi S, Algethami A, et al. Patterns of dermatological diseases in inpatient consultations at King Abdulaziz Medical City, Jeddah, Saudi Arabia: An underexploited opportunity for dermatology clinical training. Cureus. 2022;14(2):e22132. doi: 10.7759/cureus.22132.
6. Yaldiz M. Dermatological diseases in the geriatric age group: Retrospective analysis of 7092 patients. Geriatr Gerontol Int. 2019;19(7):582-5. doi: 10.1111/ggi.13627.
7. Rubegni P, Cevenini G, Lamberti A, Bruni F, Tiezzi R, Verzuri A, et al. Dermatological conditions presenting at the Emergency Department in Siena University Hospital from 2006 to 2011. J Eur Acad Dermatol Venereol. 2015;29(1):164-8. doi: 10.1111/jdv.12631.
8. Vinay K, Thakur V, Choudhary R, Dev A, Chatterjee D, Handa S. A retrospective study to evaluate the impact of in-patient dermatological consultations on diagnostic accuracy in a tertiary care setting. Indian Dermatol Online J. 2021;12(3):417-22. doi: 10.4103/idoj.idoj_662_20.
9. Neloska L, Damevska K, Kuzmanova A, Pavleska L, Kostov M, Zovic BP. Dermatological diseases in palliative care patients: A prospective study of 271 patients. J Dtsch Dermatol Ges. 2017;15(6):621-7. doi: 10.1111/ddg.13196.
10. Aksungur VL, Alpsoy E, Baykal C, Uzun S. Dermatolojide Algoritmik Tanı. İstanbul: Yelken Printing Office;2007.
11. Bolognia J, Schaffer J, Cerroni L. Dermatology. 4th ed. Vol. 1. Philadelphia: Elsevier; 2017.
12. Turan Ç, Metin N, Utlu Z, Öner Ü, Kotan ÖS. Change of the diagnostic distribution in applicants to dermatology after COVID-19 pandemic: What it whispers to us? Dermatol Ther. 2020;33(4):e13335. doi: 10.1111/dth.13335.
13. Baran R, Kechijian P. Longitudinal melanonychia (melanonychia striata): Diagnosis and management. J Am Acad Dermatol. 1989;21(6):1165-75. doi: 10.1016/s0190-9622(89)70140-3.
14. He A, Kim TT, Nguyen KD. Utilization of teledermatology services for dermatological diagnoses during the COVID-19 pandemic. Arch Dermatol Res. 2023;315(4):1059-62. doi: 10.1007/s00403-023-02492-2.
15. Bourkas AN, Barone N, Bourkas MEC, Mannarino M, Fraser RDJ, Lorincz A, et al. Diagnostic reliability in teledermatology: A systematic review and a meta-analysis. BMJ Open. 2023;13(8):e068207. doi: 10.1136/bmjopen-2023-068207.
16. Maltagliati-Holzner P. Teledermatology in Switzerland: Set-up for and examples of dermatological treatment from a telemedicine center [in German]. Hautarzt. 2019;70(5):329-34. doi: 10.1007/s00105-019-4401-0.

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Supplementary Material

Spectrum of Dermatologic Conditions and Unrecognized Skin Diseases in Hospitalized Adults: A Single-Center Cross-Sectional Study

Supplementary Tables S1–S6: Detailed body-region-specific examination findings, diagnoses, management recommendations, and treatment status. Each supplementary table corresponds to original Tables 3–8 of the manuscript. Part A presents examination findings stratified by sex and age; Part B presents diagnoses with management recommendations and treatment status.

Supplementary Table S1. Scalp Examination Findings, Diagnoses, and Management

Part A. Scalp Examination Findings Stratified by Sex and Age (n=112)

Scalp Examination Finding	Total n (%)	Female	Male	p	<65 yrs	≥65 yrs	p
Dandruff complaints / desquamation findings	47 (42.0%)	22 (37.3%)	25 (47.2%)	0.290	23 (33.8%)	24 (54.5%)	0.030*
Itching of the scalp	24 (21.4%)	19 (32.2%)	5 (9.4%)	0.003*	10 (14.7%)	14 (31.8%)	0.031*
Pustules/acne on the scalp	7 (6.3%)	–	–	–	–	–	–
Non-inflamed patch/plaque/nodule	7 (6.3%)	–	–	–	–	–	–
Pain in the scalp	1 (0.9%)	–	–	–	–	–	–

*Pearson chi-square test was used. *p<0.05. Items with cell frequency <10 were not individually analysed ('–').*

Part B. Scalp Diagnoses, Management Recommendations, and Treatment Status (diagnosed patients n=79)

Diagnosis	n (% of 112)	Personal Follow-up	Elective Outpatient Referral	Immediate Consultation	
Seborrhoeic dermatitis	46 (41.1%)	23 (50.0%)	23 (50.0%)	0 (0%)	
Androgenetic alopecia	32 (28.6%)	29 (90.6%)	3 (9.4%)	0 (0%)	
Telogen effluvium	7 (6.3%)	1 (14.3%)	6 (85.7%)	0 (0%)	
Seborrhoeic keratosis / folliculitis / nevus	14 (12.5%)	6 (42.9%)	7 (50.0%)	1 (7.1%)	
Treatment Status of Cases Referred to Dermatology (n=47)					
Untreated	45 (95.7%)	–	45	0	
Appropriate treatment	1 (2.1%)	–	1	0	
Inappropriate/incomplete treatment	1 (2.1%)	–	0	1	

Patients may carry more than one diagnosis; recommendations may differ per diagnosis. Need for dermatoscopy: 6 (5.4%).

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Supplementary Table S2. Face & Neck Examination Findings, Diagnoses, and Management

Part A. Face & Neck Examination Findings Stratified by Sex and Age (n=112)

Face & Neck Examination Finding	Total n (%)	Female	Male	p	<65 yrs	≥65 yrs	p
Erythema attacks / rash	31 (27.7%)	18 (30.5%)	13 (24.5%)	0.480	20 (29.4%)	11 (25.0%)	0.610
Facial pigmentation	27 (24.1%)	18 (30.5%)	9 (17.0%)	0.095	16 (23.5%)	11 (25.0%)	0.859
Excessive oiliness	19 (17.0%)	9 (15.3%)	10 (18.9%)	0.611	15 (22.1%)	4 (9.1%)	0.074
Itching/burning	15 (13.4%)	11 (18.6%)	4 (7.5%)	0.085	11 (16.2%)	4 (9.1%)	0.282
Eczema on the face	15 (13.4%)	7 (11.9%)	8 (15.1%)	0.616	7 (10.3%)	8 (18.2%)	0.231
Papulopustular lesions	13 (11.6%)	9 (15.3%)	4 (7.5%)	0.204	13 (19.1%)	0 (0.0%)	0.002*
Facial nodule/solid lesion	8 (7.1%)	–	–	–	–	–	–
Eyelid oedema	9 (8.0%)	–	–	–	–	–	–
Need for dermatoscopy	28 (25.0%)	–	–	–	–	–	–

*Pearson chi-square test was used. *p<0.05. DLE: discoid lupus erythematosus. Need for dermatoscopy was highest in this region: 28 (25.0%).*

Part B. Face & Neck Diagnoses, Management Recommendations, and Treatment Status (diagnosed patients n=94; total diagnoses=151)

Diagnosis	n (% of 112)	Personal Follow-up	Elective Outpatient Referral	Immediate Consultation
Rosacea	25 (22.3%)	6 (24.0%)	19 (76.0%)	0 (0%)
Solar lentigo	25 (22.3%)	16 (64.0%)	9 (36.0%)	0 (0%)
Seborrhoeic dermatitis	22 (19.6%)	7 (31.8%)	15 (68.2%)	0 (0%)
Seborrhoeic & actinic keratosis	17 (15.2%)	9 (52.9%)	8 (47.1%)	0 (0%)
Acne	12 (10.7%)	3 (25.9%)	9 (75.0%)	0 (0%)
Melanocytic nevus	8 (7.1%)	7 (87.5%)	1 (12.5%)	0 (0%)
Squamous cell carcinoma (suspected)	1 (0.9%)	0 (0%)	0 (0%)	1 (100%)
Other (melasma, DLE, blepharitis, etc.)	20 (17.9%)	7 (35.0%)	12 (60.0%)	1 (5%)
Treatment Status of Cases Referred to Dermatology (n=80)				
Untreated	77 (96.3%)	–	76	1
Appropriate treatment	2 (2.5%)	–	2	0
Inappropriate/incomplete treatment	1 (1.3%)	–	0	1

Average 1.6 diagnoses per diagnosed patient. Immediate consultation: SCC (biopsy performed) and suspected DLE.

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Supplementary Table S3. Oral Mucosa Examination Findings, Diagnoses, and Management

Part A. Oral Mucosa Examination Findings Stratified by Sex and Age (n=112)

Oral Mucosa Examination Finding	Total n (%)	Female	Male	p	<65 yrs	≥65 yrs	p
Lip peeling and crusting	41 (36.6%)	17 (28.8%)	24 (45.3%)	0.071	22 (32.4%)	19 (43.2%)	0.245
White lesion in the mouth	20 (17.9%)	8 (13.6%)	12 (22.6%)	0.210	9 (13.2%)	11 (25.0%)	0.112
Erosion, ulcer or bullae	9 (8.0%)	–	–	–	–	–	–
Red lesion in the mouth	7 (6.3%)	–	–	–	–	–	–
Burning in the mouth	5 (4.5%)	–	–	–	–	–	–
Brown lesion in the mouth	5 (4.5%)	–	–	–	–	–	–

*Pearson chi-square test was used. *p<0.05. Note: No statistically significant sex or age differences were detected for oral mucosa findings.*

Part B. Oral Mucosa Diagnoses, Management Recommendations, and Treatment Status (diagnosed patients n=55; total diagnoses=62)

Diagnosis	n (% of 112)	Personal Follow-up	Elective Outpatient Referral	Immediate Consultation
Cheilitis	26 (23.2%)	5 (19.2%)	17 (65.4%)	4 (15.4%)
Candida stomatitis	21 (18.8%)	6 (28.6%)	11 (52.4%)	4 (19.0%)
Glossitis (atrophic, geographic)	4 (3.6%)	1 (25.0%)	2 (50.0%)	1 (25.0%)
Oral aphthae	4 (3.6%)	0 (0%)	3 (75.0%)	1 (25.0%)
Venous lake	3 (2.7%)	3 (100%)	0 (0%)	0 (0%)
Treatment Status of Cases Referred to Dermatology (n=46)				
Untreated	26 (56.5%)	–	20	6
Appropriate treatment	4 (8.7%)	–	4	0
Inappropriate/incomplete treatment	16 (34.8%)	–	12	4

High under-treatment rate in oral mucosa: 34.8% receiving inappropriate/incomplete treatment, particularly for candida stomatitis. The orange shading highlights clinically significant under-treatment in this region.

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Supplementary Table S4. Trunk Examination Findings, Diagnoses, and Management

Part A. Trunk Examination Findings Stratified by Sex and Age (n=112)

Trunk Examination Finding	Total n (%)	Female	Male	p	<65 yrs	≥65 yrs	p
Brown spots on the trunk	24 (21.4%)	6 (10.2%)	18 (34.0%)	0.002*	10 (14.7%)	14 (31.8%)	0.031*
Erythematous/squamous patch/plaque (clothing-covered)	22 (19.6%)	8 (13.6%)	14 (26.4%)	0.087	15 (22.1%)	7 (15.9%)	0.424
Need for dermatoscopy	8 (7.1%)	–	–	–	–	–	–

*Pearson chi-square test was used. *p<0.05. Brown spots were significantly more common in male and older patients.*

Part B. Trunk Diagnoses, Management Recommendations, and Treatment Status (diagnosed patients n=83; total diagnoses=119)

Diagnosis	n (% of 112)	Personal Follow-up	Elective Outpatient Referral	Immediate Consultation
Cherry angioma	22 (19.6%)	20 (90.9%)	2 (9.1%)	0 (0%)
Seborrhoeic keratosis / solar lentigo	21 (18.8%)	14 (66.7%)	7 (33.3%)	0 (0%)
Xerosis cutis	17 (15.2%)	5 (29.4%)	11 (64.7%)	1 (5.9%)
Melanocytic nevus	12 (10.7%)	9 (75.0%)	3 (25.0%)	0 (0%)
Ecchymosis	8 (7.1%)	8 (100%)	0 (0%)	0 (0%)
Skin tag	8 (7.1%)	7 (87.5%)	1 (12.5%)	0 (0%)
Dysplastic nevus	1 (0.9%)	0 (0%)	0 (0%)	1 (100%)
Maculopapular drug reaction	1 (0.9%)	0 (0%)	0 (0%)	1 (100%)
Contact dermatitis	1 (0.9%)	0 (0%)	0 (0%)	1 (100%)
Tinea corporis	1 (0.9%)	0 (0%)	0 (0%)	1 (100%)
Scabies	1 (0.9%)	0 (0%)	0 (0%)	1 (100%)
Pityriasis versicolor	2 (1.8%)	0 (0%)	2 (100%)	0 (0%)
Pressure ulcer	1 (0.9%)	0 (0%)	1 (100%)	0 (0%)
Atopic dermatitis in pregnancy	1 (0.9%)	0 (0%)	1 (100%)	0 (0%)
Treatment Status of Cases Referred to Dermatology (n=48)				
Untreated	45 (93.7%)	–	39	6
Appropriate treatment	3 (6.3%)	–	3	0
Inappropriate/incomplete treatment	0 (0%)	–	0	0

Immediate consultations: dysplastic nevus, maculopapular drug reaction, contact dermatitis, tinea corporis, and scabies (n=1 each). All untreated at time of examination.

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Supplementary Table S5. Extremity Examination Findings, Diagnoses, and Management

Part A. Extremity Examination Findings Stratified by Sex and Age (n=112)

Extremity Examination Finding	Total n (%)	Female	Male	p	<65 yrs	≥65 yrs	p
Interdigital problems	52 (46.4%)	18 (31.0%)	34 (64.2%)	<0.001*	28 (41.8%)	24 (54.5%)	0.188
Nail thickening	68 (60.7%)	26 (44.1%)	42 (79.2%)	<0.001*	34 (50.0%)	34 (77.3%)	0.004*
Nail discolouration	66 (58.9%)	24 (45.3%)	42 (79.2%)	<0.001*	32 (47.1%)	34 (77.3%)	0.002*
Hand/foot keratosis	38 (33.9%)	24 (45.3%)	14 (24.1%)	0.019*	26 (38.8%)	12 (27.3%)	0.210
Leg eczema	19 (17.0%)	9 (15.5%)	10 (18.9%)	0.640	8 (11.9%)	11 (25.0%)	0.074
Itching – hands/feet	15 (13.4%)	8 (13.6%)	7 (13.2%)	0.956	8 (11.8%)	7 (15.9%)	0.529
Hand/foot eczema	13 (11.6%)	7 (11.9%)	6 (11.3%)	0.929	8 (11.8%)	5 (11.4%)	0.948

*Pearson chi-square test was used. *p<0.05. Nail changes (discolouration and thickening) were significantly more common in males and patients ≥65 years.*

Part B. Extremity Diagnoses, Management Recommendations, and Treatment Status (diagnosed patients n=100; total diagnoses=141)

Diagnosis	n (% of 112)	Personal Follow-up	Elective Outpatient Referral	Immediate Consultation
Tinea pedis / Tinea unguium	66 (58.9%)	0 (0%)	61 (92.4%)	5 (7.6%)
Callus / Hyperkeratosis	34 (30.4%)	16 (47.1%)	17 (50.0%)	1 (2.9%)
Xerosis cutis	13 (11.6%)	2 (15.4%)	11 (84.6%)	0 (0%)
Stasis dermatitis	6 (5.4%)	1 (16.7%)	3 (50.0%)	2 (33.3%)
Other dermatitis	6 (5.4%)	2 (33.3%)	3 (50.0%)	1 (16.7%)
Cherry angioma	4 (3.6%)	4 (100%)	0 (0%)	0 (0%)
Ecchymosis	4 (3.6%)	4 (100%)	0 (0%)	0 (0%)
Melanonychia striata	1 (0.9%)	0 (0%)	1 (100%)	0 (0%)
Ingrown toenail	1 (0.9%)	0 (0%)	0 (0%)	1 (100%)
Pressure sores	1 (0.9%)	0 (0%)	0 (0%)	1 (100%)
Cellulitis	1 (0.9%)	0 (0%)	1 (100%)	0 (0%)
Keloid	1 (0.9%)	0 (0%)	1 (100%)	0 (0%)
Hyperhidrosis (palmoplantar)	1 (0.9%)	0 (0%)	1 (100%)	0 (0%)
Viral warts	1 (0.9%)	0 (0%)	1 (100%)	0 (0%)
Treatment Status of Cases Referred to Dermatology (n=109)				
Untreated	99 (90.8%)	–	89	10

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Appropriate treatment	7 (6.4%)	–	7	0
Inappropriate/incomplete treatment	3 (2.8%)	–	2	1

Tinea pedis/unguium was the most prevalent diagnosis (58.9%). Immediate consultation was requested for 5 patients with tinea pedis due to diabetes/immunosuppression risk. Melanonychia striata was referred for systemic evaluation (Addison's disease screening).

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Supplementary Table S6. Anogenital Examination Findings, Diagnoses, and Management

Part A. Anogenital Examination Findings Stratified by Sex and Age (n=79)*

Anogenital Examination Finding	Total n (% of 79)	Female	Male	p	<65 yrs	≥65 yrs	p
Itching in the genital area	9 (11.4%)	5 (12.5%)	4 (10.0%)	–	4 (8.5%)	5 (13.5%)	–
Erythema in genital/inguinal region	5 (6.3%)	–	–	–	–	–	–
Itching in the anus	3 (3.8%)	–	–	–	–	–	–
Discharge from the genital area	3 (3.8%)	–	–	–	–	–	–
Genital dyspigmentation	3 (3.8%)	–	–	–	–	–	–
Lichenified plaque in genital area	2 (2.5%)	–	–	–	–	–	–
Solid anogenital lesion	2 (2.5%)	–	–	–	–	–	–
Erosion/ulcers on the genitals	1 (1.3%)	–	–	–	–	–	–

**33 of 112 patients declined consent for anogenital examination. Pearson chi-square test was used. Cell frequencies <10 were not individually analysed ('–').*

Part B. Anogenital Diagnoses, Management Recommendations, and Treatment Status (diagnosed patients n=14; total diagnoses=14)

Diagnosis	n (% of 79)	Personal Follow-up	Elective Outpatient Referral	Immediate Consultation
Erythema intertrigo	3 (3.8%)	0 (0%)	1 (33.3%)	2 (66.7%)
Genital candidiasis	3 (3.8%)	0 (0%)	0 (0%)	3 (100%)
Seborrhoeic keratoses	2 (2.5%)	0 (0%)	2 (100%)	0 (0%)
Tinea cruris	2 (2.5%)	0 (0%)	2 (100%)	0 (0%)
Idiopathic pruritus ani	2 (2.5%)	1 (50.0%)	1 (50.0%)	0 (0%)
Lichen Simplex Chronicus	1 (1.3%)	0 (0%)	1 (100%)	0 (0%)
Vitiligo	1 (1.3%)	0 (0%)	1 (100%)	0 (0%)
Treatment Status of Cases Referred to Dermatology (n=13)				
Untreated	9 (69.2%)	–	5	4
Appropriate treatment	3 (23.1%)	–	3	0
Inappropriate/incomplete treatment	1 (7.7%)	–	0	1

Despite the lowest diagnosis rate across all regions (17.7%), over one-third of patients with anogenital findings required immediate consultation. Patients were often reluctant to be examined in this region.

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