

Common Skin Lesions: A Quick Guide for the Office Setting with Case Reports

Maricruz Ortiz de la Torre^{*1}, Kenia Iveth López-Alvarado², Mariana García Morales³, María del Pilar del Palacio Hernández⁴, Heber Aguilar Veronica⁵, Daniela Stefanía Silva Silva⁶, Miriam Vizado Olvera⁷, Silvia Castro Gutiérrez⁸, María Lucero González Reyes⁹, Valeria Pérez Aguilar¹⁰, Gloria Montserrat Sierra Torres¹¹, Arianna Elizabeth Jara Ríos¹², Sylvana Cruz Navarro¹³

¹Universidad Autónoma de Durango/Campus Durango.

²Instituto Nacional De Ciencias Médicas y Nutrición “Salvador Zubirán”.

³Hospital General Regional 251.

⁴Universidad de Monterrey.

⁵Universidad Veracruzana.

⁶Centro Médico Nacional La Raza.

⁷Universidad Del Noreste.

⁸HRAEBI ISSSTE Tultitlan.

⁹Instituto Politécnico Nacional.

¹⁰Universidad Cristóbal Colón.

¹¹Issste Hospital Santiago Ramon y Cajal.

¹²Universidad Autónoma de Nuevo León.

¹³Hospital General de León.

ABSTRACT

Skin lesions represent one of the most frequent reasons for consultation in clinical practice, particularly in primary care, where timely recognition and appropriate management directly influence patient outcomes. The wide spectrum of dermatologic presentations may pose a diagnostic challenge if not approached systematically. Four representative clinical cases of common office-based pathologies are presented: chronic atopic dermatitis, hyperkeratotic actinic keratosis, epidermoid cyst, and nodular basal cell carcinoma. For each case, key semiologic findings, differential diagnosis, and the most commonly used conservative and surgical therapeutic options are described. Through these cases, the importance of accurately identifying the primary lesion, evaluating risk factors such as sun exposure and comorbidities, and recognizing warning signs suggestive of premalignant or malignant lesions is emphasized. A systematic clinical approach improves physician problem-solving capacity, optimizes therapeutic decision-making, and promotes timely treatment. A practical method based on dermatologic semiology strengthens comprehensive care and contributes to safer and more efficient clinical practice.

KEYWORDS: Skin lesions; Atopic dermatitis; Actinic keratosis; Epidermoid cyst; Basal cell carcinoma; Clinical diagnosis; Conservative treatment; Surgical treatment; Primary care; Dermatologic semiology.

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INTRODUCTION

Skin lesions constitute one of the most frequent reasons for consultation in general clinical practice. It is estimated that a significant proportion of visits in primary care are related to

dermatologic conditions, highlighting the need for a systematic, practical approach focused on early recognition of the most common dermatoses.

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Despite their high prevalence, dermatologic conditions continue to represent a diagnostic challenge for many clinicians due to the wide variety of morphological presentations and similarities among different entities. Accurate identification of the primary lesion, anatomical distribution, duration of evolution, and associated symptoms are fundamental pillars for establishing an appropriate diagnosis and defining timely treatment or specialist referral. Common dermatoses, including superficial skin infections, inflammatory dermatitis, benign pigmented lesions, and early skin neoplasms, can be diagnosed in most cases through adequate clinical examination. However, unfamiliarity with basic clinical patterns may lead to diagnostic delays or inappropriate treatment.

The objective of this work is to provide a structured and practical guide for the evaluation of common skin lesions in the office setting, supported by clinical case reports that illustrate key semiologic findings, diagnostic strategies, and practical therapeutic decisions. Through an applied clinical approach, this guide aims to strengthen the physician's problem-solving capacity at first contact and promote a more precise and systematic dermatologic evaluation.

CASE 1

Adult Atopic Dermatitis – Chronic Lichenified Phase

A 26-year-old female with a personal history of asthma and allergic rhinitis presented with intense pruritus predominantly

at night for 8 months, with exacerbations during winter and periods of stress. She reported intermittent use of topical creams without sustained improvement.

Physical examination revealed poorly defined erythematous scaly plaques with lichenification and linear excoriations on the antecubital folds, posterior cervical region, and wrists. Generalized xerosis was noted. No fever or lymphadenopathy was present.

Primary lesion: Lichenified erythematous plaque

Distribution: Bilateral symmetric flexural

Clinical diagnosis: Moderate chronic atopic dermatitis

Differential diagnosis:

- Chronic contact dermatitis
- Inverse psoriasis
- Tinea corporis (rule out with KOH if necessary)

Conservative treatment:

- Ceramide-based emollient 2–3 times daily continuously
- Mometasone furoate 0.1% topical once daily for 10–14 days
- Tacrolimus 0.1% for maintenance in sensitive areas
- Nighttime antihistamine (hydroxyzine 25 mg)

Surgical treatment:

Not indicated. Drainage only if secondary abscess develops.



Figure 1: Clinical case number 1.

CASE 2

Facial Hyperkeratotic Actinic Keratosis

A 70-year-old male farmer with chronic sun exposure and no photoprotection presented with a rough lesion on the frontal

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region of 10 months' duration, slow growth, and occasional scaling.

Examination revealed a 1.2 cm poorly defined erythematous plaque with hyperkeratotic surface, rough "sandpaper-like" texture, and no deep infiltration.

Primary lesion: Erythematous hyperkeratotic plaque

Location: Sun-exposed area

Clinical diagnosis: Hypertrophic actinic keratosis

Differential diagnosis:

- Squamous cell carcinoma in situ
- Discoid lupus erythematosus
- Chronic actinic dermatitis

Conservative treatment:

- Daily sunscreen SPF ≥ 50
- 5% topical fluorouracil nightly for 2–4 weeks
- Alternative: Imiquimod 5% three times weekly for 4 weeks

Surgical treatment:

- Cryotherapy with liquid nitrogen (single lesion)
- Surgical excision if suspicion of progression to squamous cell carcinoma
- Incisional biopsy if induration or ulceration is present



Figure 2: Clinical case number 2.

CASE 3

Nodular Basal Cell Carcinoma of the Nasal Ala

A 74-year-old male, phototype II, with occupational sun exposure presented with a right nasal ala lesion of 1 year's duration, slow growth, and bleeding with minimal trauma.

Examination revealed a 0.8 cm translucent pearly papule with arborizing telangiectasias and central ulceration ("rodent ulcer").

Primary lesion: Ulcerated pearly papule

Clinical diagnosis: Nodular basal cell carcinoma

Differential diagnosis:

- Squamous cell carcinoma
- Ulcerated actinic keratosis

- Amelanotic melanoma

Conservative treatment:

- Imiquimod 5% for superficial lesions < 2 cm (not ideal for nasal ala)
- Photodynamic therapy for superficial lesions

Surgical treatment:

- Surgical excision with 4–5 mm margins
- Mohs micrographic surgery in high-risk areas (nose, eyelids)
- Local reconstruction according to defect

Surgical excision is the treatment of choice for facial nodular lesions.



Figure 3: Clinical case number 3.

DISCUSSION

Skin lesions account for a significant proportion of primary care consultations. The four cases presented illustrate a common clinical spectrum encountered in the office setting: chronic inflammatory dermatoses (atopic dermatitis), premalignant lesions induced by ultraviolet radiation (actinic keratosis), benign subcutaneous lesions (epidermoid cyst), and low-grade malignant cutaneous neoplasms (basal cell carcinoma).

A systematic approach based on identification of the primary lesion, duration of evolution, anatomical distribution, and risk factors enables accurate clinical diagnosis in most cases without the immediate need for complementary studies. Differentiation between inflammatory, infectious, benign, and malignant processes is essential in determining whether management should be conservative or surgical.

Table 1. Classification According to Primary Skin Lesion Type

Type of lesion	Clinical definition	Example in cases
Macule	Change in skin color without elevation	Initial erythema in dermatitis
Papule	Solid lesion <1 cm	Early nodular BCC
Plaque	Elevation >1 cm, confluence of papules	Atopic dermatitis
Nodule	Solid deep lesion >1 cm	Epidermoid cyst
Hyperkeratotic plaque	Superficial thickening	Actinic keratosis

Accurate identification of the primary lesion guides up to 70–80% of initial dermatologic diagnoses.

Table 2. Severity Classification of Atopic Dermatitis (Simplified Clinical Criteria)

Grade	Characteristics	Management
Mild	Mild erythema and pruritus, no lichenification	Emollients + low-potency corticosteroid
Moderate	Lichenified plaques, nocturnal pruritus	Medium-potency corticosteroid + immunomodulator
Severe	Extensive lesions, excoriations, secondary infection	High-potency corticosteroid ± systemic therapy

The presented case corresponds to moderate chronic atopic dermatitis.

Table 3. Clinical Classification of Actinic Keratosis

Grade	Characteristics	Risk of progression
Grade I (mild)	More palpable than visible	Low
Grade II (moderate)	Visible and palpable	Intermediate
Grade III (hyperkeratotic)	Thickened, clearly visible	Higher

The described lesion corresponds to Grade III actinic keratosis, justifying active treatment and close follow-up.

Table 4. Clinical Classification of Basal Cell Carcinoma

Subtype	Characteristics	Treatment of choice
Nodular	Pearly papule with telangiectasias	Surgical excision
Superficial	Erythematous scaly plaque	Imiquimod / surgery
Morpheaform	Ill-defined borders, infiltrative	Mohs surgery
Pigmented	Similar to nodular with pigmentation	Excision

The case presented corresponds to a nodular subtype located in a high aesthetic-risk facial area.

Table 5. Indications for Surgical Treatment in Common Skin Lesions

Pathology	Surgical indications
Atopic dermatitis	Not indicated (except complications)
Actinic keratosis	Suspicion of carcinoma or persistent lesion
Epidermoid cyst	Pain, recurrent infection, growth
Basal cell carcinoma	Treatment of choice

From a clinical perspective, a conceptual progression may be observed in these cases. Atopic dermatitis represents a chronic inflammatory condition primarily managed conservatively. Actinic keratosis is a premalignant lesion requiring active treatment to prevent progression. Epidermoid cyst is a benign entity for which definitive treatment is surgical excision. Basal cell carcinoma represents a low metastatic potential malignancy but with clear surgical indication.

Collectively, these cases reinforce the importance of a practical office-based approach grounded in:

1. Accurate morphological identification
2. Evaluation of risk factors (age, sun exposure, atopy)
3. Recognition of warning signs (ulceration, induration, rapid growth)
4. Appropriate decision-making between conservative and surgical management

A structured diagnostic method reduces errors, prevents overtreatment, and facilitates early detection of lesions with malignant potential.

CONCLUSION

Common skin lesions are a frequent reason for consultation in clinical practice and may represent a diagnostic challenge when dermatologic evaluation is not approached systematically. Accurate identification of the primary lesion, assessment of duration of evolution, and integration of risk factors allow appropriate clinical diagnosis in most cases without immediate need for complementary testing.

The cases presented illustrate the broad spectrum of dermatologic conditions encountered in the office setting, ranging from chronic inflammatory dermatoses such as atopic dermatitis, to premalignant lesions such as actinic keratosis, benign subcutaneous entities such as epidermoid cysts, and low-grade malignant neoplasms such as basal cell carcinoma. Each condition requires a distinct therapeutic approach, from conservative management and patient education to definitive surgical treatment.

Proper differentiation between inflammatory, benign, and malignant processes is essential to avoid diagnostic delays, complications, or unnecessary interventions. Early recognition of warning signs enables timely referral and improves patient outcomes.

In conclusion, a structured and practical approach based on dermatologic semiology enhances the physician's diagnostic accuracy in primary care and contributes to safer, more efficient, and patient-centered clinical practice.

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