Chapter 9: Facial Skin Disorders

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Facial skin disorders are among the most common problems seen in the head and neck region. The skin lesions are readily apparent and visible. The diagnosis may be extremely difficult, especially where related to drug eruptions. A thorough history is most important. A complete examination of the entire body is mandatory, as certain dermatoses have nonspecific appearances in the face but have characteristic body distributions.

Skin disorders are not stressed in most ear, nose and throat textbooks, and most dermatologic textbooks treat dermatoses by entities and systems, not by regions.

Subjective Complaints

Skin disorders are different from other disorders of the body in that the lesion is readily seen. There may or may not be associated symptoms such as bleeding, pruritus, or pain. History is very important in the diagnosis of facial skin disorders. (Knowledge of possible etiologies is important in the subjective evaluation.)

Past Medical History. Asthma, hay fever, previous skin disorders (atopy, psoriasis, basal cell epithelioma, neurodermatitis, herpes simplex, etc), systemic diseases (systemic lupus erythematosus, diabetes mellitus), and immune deficiencies. Patients with immune deficiency states are prone to infections and skin cancers.

Occupation/Association. Exposure to irritants, sensitizing chemicals.

Family History. Urticaria, atopic dermatitis, acne, rosacea, psoriasis, seborrheic dermatitis.

Age of Onset:

Infants. Superficial bacterial infection, herpes simplex, atopy.

Child. Warts, papular urticaria.

Adolescence. Acne.

Geriatric. Senile freckles, senile keratosis, carcinoma of the skin.

Seasonal/Travel. Contact dermatitis, photosensitivity.

Habits. Diet - allergy; smoking - carcinoma of the lip; contactant - contact dermatitis.


Drug History. Very important, as drug eruptions are quite varied in appearance.
Allergic History. Atopic dermatitis.

Other Sites in the Body. Most skin reactions in the face can involve other sites, and sites of involvement are characteristic of certain diseases such as psoriasis, seborrheic dermatitis, and atopy.

Photosensitivity - Acute. Sunburn from prolonged exposure. If recurrent and not due to prolonged sun exposure, consider medication (phenothiazines, tetracyclines, and griseofulvins are among many medications that have photosensitivity as a side reaction). Porphyria can cause photodermatitis.

Growth Changes. Malignant neoplasms - squamous cell carcinoma, basal cell carcinoma, and malignant melanoma. Squamous cell and basal cell carcinomas are in the sun-exposed areas. Benign growths include warts, keloids, and keratoacanthoma (mimic a squamous cell carcinoma).

Scaly Lesion. Inquire about psoriasis, seborrheic dermatitis, secondary syphilis, and discoid and systemic lupus erythematosus.

Bullae/Vesicles. Must look for causes such as erythema multiforme, primary irritant and sensitization reactions (contact dermatitis), burns, pemphigus, herpes, and drug reactions.

Hives/Urticaria. Ask about mosquito or other insect bites, angioneurotic edema, food allergy, drug reactions, and contact dermatitis.

Syphilis. Chancre of the lips; macular papular eruptions in the secondary stage, and gummas of the tertiary stage.

Acute Conditions. Infections (as impetigo, folliculitis, cellulitis), contact dermatitis, dermatitis medicamentosa, acute photodermatitis, and herpes simplex.

Chronic Conditions. Can be persistent or recurring, as psoriasis, seborrheic dermatitis, atopy, and neurodermatitis.

Neck Mass. Tenderness - associated with acute infection. Nontender - large squamous cell carcinoma or other malignancy. Some malignant melanomas of the scalp metastasize to the regional lymph nodes while the primary site is still difficult to find on cursory examination (Table 9.1).
Table 9.1. Classification of Facial Skin Disorders

I. *Dermatitis skin*
   - Atopic dermatitis
   - Contact dermatitis, acute
   - Exfoliative dermatitis
   - Factitial dermatitis
   - Lichen simplex chronicus (localized neurodermatitis)
   - Nummular eczema
   - Radiodermatitis, chronic
   - Seborrheic dermatitis

II. *Growth change*
   - Epithelioma, basal cell (always confirm by biopsy)
   - Hemangioma
   - Nevus
   - Seborrheic keratosis
   - Senile (or actinic) keratosis
   - Verruca

III. *Infection*
   - Folliculitis
   - Furuncle
   - Hidradenitis
   - Impetigo
   - Pyogenic granuloma
   - Varicella
   - Herpes simplex
   - Zoster

IV. *Lesions, special type*
   - Comedo, acne
   - Insect bite
   - Milium
   - Purpura
   - Urticaria

V. *Loss of tissue*
   - Alopecia areata
   - Excoriation
   - Scleroderma
   - Ulcer (determination of cause mandatory)
   - Vitiligo

VI. *Scaling*
   - Ichthyosis
   - Lupus erythematosus, chronic discoid (further study mandatory)
   - Psoriasis
   - Seborrheic dermatitis

VII. *Vesicles, bullae*
   - Erythema multiforme
   - Primary irritant and sensitization reactions.
Objective Findings

Regional Skin Lesions

Scalp

1. **Seborrheic Dermatitis.** Chronic scaly eruption, dry white yellowish scale (see Scale Lesions, under Specific Skin Disorders).

2. **Local Neurodermatitis.** Chronic itchy lesion with pigmented lichenified skin, exaggerated skin lines overlying lichenified skin, and thick circumscribed scaly plaques.

3. **Psoriasis.** Chronic scaly eruption with a reddish hue (see Scaly Lesions, under Specific Skin Disorders).

Face

1. **Acne.** Papules to pustules, especially during adolescence.

2. **Rosacea.** Accentuation of normal facial flush, especially over central forehead, nose, malar prominence, and chin. Late change is *rhinophyma* with thickened oily skin due to sebaceous gland hypertrophy. The nose is the most common site involved.

3. **Senile Keratosis.** Keratotic, discrete lesions with some brownish discoloration, in sun-exposed areas; can be macular or maculopapular.

4. **Seborrheic Dermatitis.** Chronic scaly eruption, up along alar and nasolabial groove and frown areas between the brows.

5. **Sebaceous Cysts** (more correctly termed epidermal inclusion cysts; true sebaceous cyst is rare). Cystic lesion in dermis and subcutaneous layers of the skin.

6. **Epithelioma.** Squamous cell and basal cell carcinoma (see Neoplasm, under Specific Skin Disorders).

7. **Contact Dermatitis.** Acute eruption from erythema to bullae on an erythematous swollen base, with severe pruritus.

8. **Atopy.** Pruritic exudative or lichenified eruption.

9. **Photosensitivity or Photodermatitis.** Erythema to swelling, vesicles and bullae with erythematous base; painful.

10. **Chronic Discoid Lupus Erythematosus and Systemic Lupus Erythematosus.** Red, asymptomatic, local plaque on the face in a butterfly distribution, scaly follicular plugging, atrophy, and telangiectasia. Often cannot distinguish the facial rash of chronic discoid from systemic lupus erythematosus without systemic involvement (joints, kidney) (see also Specific Skin Disorders).
**Lip**

1. **Perleche.** Inflammation at the corners of the mouth with accumulation of whitish epithelium resembling a pseudomembrane. Occurs in malnutrition and vitamin B deficiencies and oral moniliasis.

2. **Herpes Simplex (Cold Sores).** Ulcers with erythematous base; painful; start as ulcers.

3. **Leukoplakia.** Whitish areas, may be flat or raised. Flat leukoplakia has 5% incidence of malignant changes, and raised leukoplakia, especially with an erythematous base, has much higher incidence of malignant changes.

4. **Carcinoma (Basal Cell and Squamous Cell)** (see Neoplasm, under Specific Skin Disorders). Basal cell carcinoma occurs more on upper lip and squamous cell carcinoma more on lower lip.

5. **Cheilitis.** Inflammation of the lips as from lip biting, infection, and photodermatitis.

**Ear**

1. **Localized Neurodermatitis.** Involvement of auricle and postauricular area.

2. **Seborrheic Dermatitis.**

3. **Contact Dermatitis.**

4. **Psoriasis.**

5. **Chronic Bacterial Infection.** Pustule, folliculitis to cellulitis. If most of the auricle is erythematous, edematous, and very tender, this is perichondritis.

6. **Discoid Lupus Erythematosus** (see also Specific Skin Disorders, and Regional Skin Lesions, Face).

7. **Carcinoma (Basal Cell and Squamous Cell).**

**Specific Skin Disorders**

**Dermatitis**

1. **Contact Dermatitis.** Includes all dermatitis due to chemical substances, natural or synthetic, in contact with skin. The lesions are characteristically sharply demarcated and the spectrum of reaction ranges from faint transient erythema to massive bullae on an erythematous swollen base. Itching is an accompanying symptom. The incubation period varies greatly from as short a week to longer. The most common sites are the face, neck, back of hand, forearms, male genitalia, and lower legs.
2. **Atopic Dermatitis.** The typical adult changes are thickening and lichenification due to rubbing and excoriating and may have partial depigmentation. In the infant, erythema, vesicular formation, and eczema are evident. The distribution is chiefly to the face, neck, antecubital fossa, hands, wrist, and popliteal fossa. Secondary bacterial and viral infections are the most common complications.

3. **Neurodermatitis.** Divided into circumscribed neurodermatitis (lichen simplex chronicus) and nummular dermatitis.

   **Circumscribed Neurodermatitis** shows typically accentuated skin lines and confluent papules characteristic of lichenification. Itching is an accompanying symptom. The most common sites in the head and neck are the occipital nuchal region, side of neck, scalp and external auditory canal.

   **Nummular Dermatitis** consists of round, nummular (coinlike) patches of oozing dermatitis, principally on back and extensor surfaces of the extremities. In the head and neck, the neck is the most common site.

**Scaly Lesions**

Most common of the scaly face lesions are psoriasis and seborrheic dermatitis.

1. **Psoriasis.** A chronic, recurrent scaling eruption. The scaling is silvery white, imbricated, and not readily detached. The plaques or papules are more or less raised and sharply marginated. Geographic distribution includes the scalp, elbows, knees, chest, back, and buttock.

2. **Seborrheic Dermatitis.** A chronic scaling eruption of yellowish, somewhat greasy adherent scales, in hairy areas rich in sebaceous glands and, in more extensive cases, the intertriginous areas. The common sites are scalp, eyebrow, nasal fold, retroauricular area, external auditory canal, and presternal and interscapular areas.

3. **Other Facial Scaly Eruptions** (include secondary syphilis). See Syphilis in this section and Discoid and Systemic Lupus Erythematosus under Regional Skin Disorders (Face), and in this section.

**Neoplasm**

1. **Basal Cell Carcinoma (Epithelioma).** Growth with waxy and pearly appearance, with central ulcer or dimple; slow-growing; lymph node spread is rare. Early ones can be difficult to distinguish from senile keratosis. Involves sun-exposed areas, and most commonly seen in face, auricle, and nose.

2. **Squamous Cell Carcinoma.** Small, reddish conical mass with ulceration. If large and friable, can have lymph node metastasis. Faster growth than basal cell carcinoma.

3. **Keratoacanthoma (Molluscum Pseudocarcinoma).** Benign, raised, umbilicated growth that resembles a fast-growing, well differentiated squamous cell carcinoma. It grows
rapidly for 1-2 months (8-28 weeks) and then involves involution. Treatment is simple excision. Be careful not to mistake for a large aggressive squamous cell carcinoma.

4. Malignant Melanoma

*Nodular type* has pigmented nodules with satellitosis and varied coloration (brown to black); very aggressive, with early lymph node metastasis. Small nodular malignant melanoma has 75% cure rate, whereas those with lymph node metastasis have a 10-25% incidence of 5-year survival.

*Superficial spreading melanomas* are pigmented lesions that have hyperpigmented changes but no nodularity or satellitosis. They are characterized by centrifugal growth with regression of the older areas to a paler color. Look for any nodularity, as the prognosis and treatment are those for a nodular malignant melanoma and not superficial spreading melanoma.

*Hutchinson's freckles.* The most superficial form of malignant melanoma. It is also known as *lentigo maligna.* It is histologically malignant and resembles freckles that are growing. It has no nodularity, and has variegated color with a blue cast and irregularity in outline.

5. Wart. Occurs especially in the lip with a hyperkeratotic mass; it is nontender and nonpruritic.

6. Keloid/Hypertrophic Scars. Hypertrophic scar is a moderately raised, red, indurated enlargement of scar. Keloid is a marked, nodular enlargement and in ear lobe can be pedunculated. For reasons unknown, hypertrophic scars and keloids seldom form in the skin of the middle third of the face. They most commonly form in the ear, especially the ear lobe and the neck.

**Infections**

1. Pustules. As seen in acne.

2. Impetigo. A superficial pyoderma with a superficial vesicle that ruptures and is covered with a thick, yellowish crust. It is contagious and caused by *Staphylococcus aureus.*

3. Folliculitis. Infection along the hair follicles.

4. Cellulitis. Infection with swelling, erythema, and tenderness, and often accompanying fever. Most often are due to group A beta-hemolytic streptococci but can occur with any organism.

5. Erysipelas (St. Anthony's Fire). An acute inflammation, due to *Streptococcus pyogenes,* with a sharply defined edematous, spreading, hot, erythematous area with or without vesicle or bullae formation.
**Discoid and Systemic Lupus Erythematosus**  
*(see also Regional Skin Lesions, Face).*

Chronic discoid lupus erythematosus and systemic lupus erythematosus are characterized by red, asymptomatic, local plaques on the face in a butterfly distribution, scaly follicular plugging, atrophy, and telangiectasia. Often cannot distinguish the facial rash of chronic discoid from systemic lupus erythematosus without systemic involvement (joints, kidney).

**Hives and Urticaria**

Wheals with marked itching. The wheals vary greatly in size, shape, and amount of swelling. Angioneurotic edema often involves lips and face over a larger area. Insect bites will show accompanying skin puncture mark.

Urticaria is divided into two types. The *acute* form persists for less than 2 weeks, often with massive initial onset and gradual subsidence. The cause is usually a food, drug, or physical trauma. *Chronic* urticaria persists recurrently for weeks, months, or years. Obscure factors such as chronic infection, gastrointestinal disease or psychosomatic disturbances are etiologies.

**Hirsutism**

Congenitally, hair can be seen around the upper lips of certain females. Male type of hair development in females, especially around the lips, chin, and neck, is caused by excess androgen secretion or medication.

**Pigmented Lesions**

1. **Nevi (Moles).** Pigmented lesions from flat to dome shapes, polypoid, and even papillomatous. They can be amelanotic to brown or black and do not grow.

2. **Addison's Disease.** Diffuse darkening of the skin.

3. **Senile Freckles.** Due to excess amount of melanin in melanocyte of epidermis and consist of yellowish or brownish macules on sun-exposed skin.

4. **Chloasma (Melasma).** Light brown patches of irregular shape and size on the skin of face, axilla, linea alba, groin, and around nipple.

5. **Malignant Melanoma** (see Neoplasm).
Drug Eruptions on Dermatitis Medicamentosa

Usually abrupt onset of widespread symmetrical erythematous eruption with constitutional symptoms (malaise, arthralgia, headache, and fever). They are classified as:

1. Erythematous (sulfonamide, antihistamine, barbiturate).
2. Eczematoid or lichenoid (gold, quinine).
3. Acneiform or pyodermic (steroid, bromide).
4. Urticarial (penicillin, serum).
5. Bullous (iodide).
6. Fixed (barbiturate).
7. Exfoliative (gold, arsenical).
8. Nodose (sulfathiazole, salicylate).
9. Exanthematous eruption.

Syphilis

1. Primary. Chancre is a painless superficial ulcer with firm indurated margins and regional lymphadenopathy. In the face, the lip is the most common site. It appears 10-90 days after exposure.

2. Secondary. The lesions appear a few weeks after chancre development and consist of nonpruritic macular, papular, pustular, or follicular lesions, with maculopapular rash the most common. The skin lesions are generalized and also involve mucous membrane.

3. Tertiary. Lesions are (a) multiple nodules that ulcerate or resolve by forming atrophic pigmented scars, or (b) a solitary gumma that starts as a painless subcutaneous nodule that eventually ulcerates.

Assessment

A thorough history and complete physical examination can often yield the diagnosis. It is important to examine the rest of the body skin, as certain skin diseases have characteristic skin site involvements.

Infections. (1) complete blood count; (2) culture and sensitivity is important; (3) blood culture is done if evidence of sepsis.
Biopsy. All neoplastic lesions or suspicious neoplastic lesions or undiagnosed lesions are biopsied. Be sure to include in the biopsy a section of normal tissue.

Malignant Melanoma. Especially with lymph node enlargement, must have systemic workup of brain, liver, bone, and lung, as hematovenous spread occurs in over 15% of patients.

Squamous Cell or Basal Cell Carcinoma. If near the external auditory canal, eye, or nasal cavity, must have thorough evaluation of the contiguous structures. Once the carcinoma involves the ear, nose, sinuses, or eyes, the spread is rapid and aggressive.


Syphilis. VDRL and other serologic tests if suspect.

Neurodermatitis. Psychiatric workup.

Atopic Dermatitis. Allergic workup.

Dermatitis Medicamentosa. Eosinophil count may be helpful; careful and repeat history must be taken and evaluated.

Male Type Hirsutism. Serum and urinary androgens.

Chronic Photodermatitis. Workup for porphyria, especially porphyria cutanea tarda.

Contact Dermatitis. Patch test with suspected agents. Inquire about (1) diffuse airborne contactants (insecticidal sprays, ragweed pollen, camphor, paints), and (2) local; cosmetics, metals (nickel, white gold alloys), plants (especially poison oak or ivy) and hatbands.

Immunodeficiencies. Recurrent infections, especially in infants and children, are suspect for immune deficiency disease. Must evaluate the immunoglobulins (especially IgG, IgA, and IgM) and B- and T-lymphocytes.

T-cell or lymphocytoid deficiency may result in tuberculosis, other fungal diseases, some viral and chronic gram-negative infections.

B-cell or plasmacytoid deficiency may result in extracellular pyogenic infections.

Patients on immunosuppressive therapy, especially transplant patients, are more susceptible to skin cancers and sarcomas.

Warts. In infants and children, facial warts are associated with higher incidence of laryngeal papilloma as well as with vaginal (venereal) warts in the mother.
**Addison's Disease.** Urinary 17-keto-steroids and 17-hydroxycorticosteroid, plasma cortisol, and ACTH levels.

**Plan**

**Nonspecific**

**Pruritus.** Antihistamines such as chlorpheniramine, 4 mg *bid* to *qid*, or Benadryl, 25-50 mg *bid* to *qid*; sedative: phenobarbital, 15-30 mg *bid* to *qid*, Valium, 5 mg *bid* to *qid*. Corticosteroids: rarely.

**Local Measures for Dermatoses**

1. **Acute.** Lesions are recent, red, burning, itching, and blistering. Treat with a wet preparation such as NaCl or sodium bicarbonate and placed as a soak or wet dressing (wet to dry). Open dressing is preferred.

2. **Subacute.** Wet preparations as lotions and emulsions such as calamine, coal tar, or acne lotions.

3. **Chronic.** Wet preparation on a shake lotion, ointment, or cream.

**Specific**

**Contact Dermatitis.** Avoidance, local measures, corticosteroids rarely, and medication for pruritus. Topical preparation use include Synalar solution; neutral soap (eg, Basis); Cordran Ointment, 1/2 strength, and Eucerin, equal parts; and salicylic acid, 2%, in Cordran ointment.

**Atopic Dermatitis.** Local measures, allergic workup and avoidance of allergens, and corticosteroids in severe cases.

**Neurodermatitis.** Topical steroid; avoid stress; recommend psychiatric care.

**Infections.** Antibiotics, as infections are usually due to staphylococcal organisms. Penicillin or erythromycin is the drug of choice. For penicillin-resistant organism, dicloxacillin is used. For abscesses, incision and drainage along with antibiotics.

**Drug Eruption or Dermatitis Medicamentosa.** Diagnosis is important; cessation of offending drug; local treatment; antihistamines; and, rarely corticosteroids.

**Psoriasis.** Local treatment with tar or corticosteroid cream wrapped with Saran wrap; ultraviolet irradiation; systemic corticosteroid and systemic methotrexate in fulminant cases. Scalp psoriasis is treated with aerosol - HC, Baker's P&S liquid, or Anthralin preparations. Facial skin can be treated with Zetar emulsion, Cordran tape, Valisone ointment, or Kerolyt gel.
Seborrheic Dermatitis. Seborrhea of the scalp: Selenium sulfide or Selsun suspension, valisone, 0.1% lotion, or Sebizon lotion.

Seborrhea in non-hair-bearing area: 3-5% sulfur in hydrophilic ointment.

Seborrhea in intertriginous areas: astringent wet dressings followed by 3% iodochlohydroxyquin and 1% hydrocortisone in an emulsion base.

Acne. Balanced diet; avoid exposure to oil and grease; eliminate all possible medication, especially bromides and iodides; treat with tetracycline, 250 mg qid; local measures as keratoplastic and keratolytic agents.

Urticaria/Hives. Antihistamine, epinephrine injections, and possible corticosteroid; avoidance of allergen.

Herpes Simplex. Avoid transfer to eye; local treatment with moist styptic pencil; analgesia and antipruritic agent as necessary.

Herpes Zoster. Locally, calamine lotion; analgesia and antipruritic medication as necessary. In elderly patient, workup for undiagnosed malignancy (lymphoma, leukemia, and other malignancies).

Systemic Lupus Erythematosus. Corticosteroid.

Discoid Lupus Erythematosus. Corticosteroid cream has been helpful; treat chronic infections with local and systemic antibiotics.

Rosacea. Avoid extremes of temperature; reduce emotional stress; and eliminate coffee, alcohol, and spicy foods. Topical therapy is similar to that for acne, with lotion containing sulfur and/or resorcin.

Porphyria. Protection from sun; abstinence from alcohol, estrogen, and iron salts, and sensitizing drugs as griseofulvin and barbiturates.

Acute Photodermatitis. Analgesia; hydration; cooling and soothing wet dressings; follow with lotions.

Addison's Disease. Corticosteroid replacement.

Hirsutism. Stop the androgenic drug, or workup and treatment for androgen-producing adrenal cortical neoplasm or hyperplasia.

Syphilis. Adequate penicillin therapy.

Warts. Surgical excision, liquid nitrogen, or keratolytic agents.

Cysts. Surgical removal.
Nevi. Watch, and early biopsy if growing or change in color. Avoid chronic irritation.

Senile Keratosis. Watch, avoid sun exposure or cover with sun screen lotion.

Keloids. Excision and intralesional injection with corticosteroid. Grenz (soft) x-ray therapy has been used by some. Requires 2000 rads (should be discouraged).

Hypertrophic Scars. Many will regress so wait for 9-12 months to see if regression occurs. If not, treat like keloid.

Keratoacanthoma. Proper diagnosis is the most important. They can be mistaken for large aggressive squamous cell carcinomas and thus excessive surgical excision may be performed. Local excision is all that is required for this disease.

Basal Cell Carcinoma. Total excision with a 5- to 8-mm margin; radiation therapy; local chemotherapy with 5-fluoroacetil cream, or Mohs' chemosurgery. Small lesions may be treated by dermatologist with excision and curettage.

Squamous Cell Carcinoma. Total excision with at least a 1-cm margin. If there are palpable lymph nodes in region of drainage, a radical neck dissection is performed.

Malignant Melanoma. Nodular type: wide excision and regional lymph node dissection. Superficial spreading and Hutchinson's freckles: wide local excision. Lesions with distant metastasis should be treated with chemotherapy, as well.