

RECOGNIZING COMMON SKIN DISORDERS

DERMATITIS

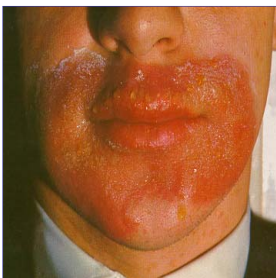
ECZEMATOUS DERMATITIS

- THE MOST COMMON INFLAMMATORY SKIN DISEASE
- SEVERAL TYPES OF ECZEMATOUS DERMATITIS EXIST:
 - PRIMARY / ALLERGIC CONTACT
 - ADULT & INFANTILE ATOPIC DERMATITIS
 - POMPHOLYX (DYSHIDROTIC) ECZEMA
 - ASTEATOTIC (ECZEMA CRAQUELE)

CONTACT DERMATITIS

- AGE: Equal occurrences in all ages
- RACE: Black skin is less susceptible
- ETIOLOGY: Delayed-hypersensitivity reaction with latent period of a few days to years (sensitized lymphocytes)
- COMMON IRRITANTS: Airborne allergens (plants, pollens, sprays), jewelry, clothing, furs, deodorant, shoes, hosiery

CONTACT DERMATITIS SYMPTOMS



- ACUTE STAGE: pruritis, erythema and edema, exuding serum and crusts
- SUBACUTE STAGE: dry scales, erythema
- CHRONIC STAGE: lichenification (thickening of the epidermis)

CONTACT DERMATITIS MANAGEMENT AND TREATMENT

- Identify and remove the agent
- Wet dressings for acute stage
- Topical corticosteroids for chronic stage
- Prescription medication for severe reactions
 - Prednisone
 - Antihistamines

ATOPIC DERMATITIS

- AGE: Onset in first 2 months of life and by the first year in 60 percent of patients
- GENDER: Slightly more common in males
- ETIOLOGY: Type I (IgE-mediated) hypersensitivity reaction as a result of release of vasoactive substances from mast cells and basophils sensitized by interaction of the antigen with IgE.

ATOPIC DERMATITIS SYMPTOMS



- Pruritis results in constant scratching which can lead to a vicious cycle of ***itch-scratch-rash-itch***
 - ***Koebner's Phenomenon***
- Rash is lichenification of the skin
- Tendency to develop generalized infections
- White dermographism
- Facial pallor
- Ichthyosis vulgaris in 10 percent of patients

ATOPIC DERMATITIS DIFFERENTIALS

- Rare metabolic disorders: gluten-sensitive enteropathy, glucagonoma syndrome, phenylketonuria, histidinemia
- Rare immunologic disorders: Hyper-IgE syndrome, Wiskott-Aldrich syndrome, selective IgA deficiency

ATOPIC DERMATITIS COURSE AND PROGNOSIS

- Spontaneous incomplete remission with occasional recurrences during adolescence. In most patients, the disease persists for 15 to 20 years.
- 30 to 50 percent of patients will develop asthma or hay fever

ATOPIC DERMATITIS MANAGEMENT AND TREATMENT

- Allergic work-ups usually do not reveal a specific allergen
- Education of the patient to avoid itching and rubbing is the most important intervention
- Antihistamines are useful in reducing itching
- Topical corticosteroids reduce the itching and prevent dryness of the skin but are useless if the patient continues to scratch

POMPHOLYX (DYSHIDROTIC) ECZEMA

- Pompholyx = bubble
- AGE: usually under 40 years of age
- GENDER: equal occurrences
- ETIOLOGY: little evidence that sweating plays a role in the pathogenesis; half of the patients have atopic dermatitis histories; emotional stress is often a factor

POMPHOLYX ECZEMA SYMPTOMS



- Distribution is regional to the hands and the feet with sites of predilection bilaterally on the sides of the fingers, palms, soles
- Pruritis and painful fissures
- Itching vesicles
- "Tapioca" appearance

POMPHOLYX ECZEMA DIFFERENTIALS

- Acute contact dermatitis

POMPHOLYX ECZEMA COURSE AND PROGNOSIS

- EARLY: Vesicles, usually small, deep-seated, appearing like "tapioca" in clusters; occasionally bullae, especially on the feet
- LATER: Scaling, lichenification, painful fissures, and erosions
- Recurrent attacks with remission intervals of weeks to months

POMPHOLYX ECZEMA MANAGEMENT AND TREATMENT

- Vesicle stage: Wet dressings; large bullae should be drained but not unroofed
- Eczematous stage: Topical corticosteroids
 - limited success
- Systemic antibiotics are indicated if crusts, tenderness, and erythema are present

ASTEATOTIC DERMATITIS (ECZEMA CRAQUELE)

- A relatively common dermatitis that occurs in the winter and in older persons on the legs, arms, and hands and is characterized by dry, "cracked", fissured skin
- AGE: Over 40 years of age
- GENDER: More common in males
- ETIOLOGY: Asteatosis (loss of lipids) can occur with over-bathing, aging, a genetic tendency for dry skin and high temps with low humidity (heated rooms, climates)

ASTEATOTIC DERMATITIS SYMPTOMS



- Dry, "cracked" skin with red fissures and slight scaling, and sometimes lichenification
- Diffuse skin involvement (no identifiable borders)
- Predilection for legs, dorsa of hands and forearms

ASTEATOTIC DERMATITIS MANAGEMENT AND TREATMENT

- Increase ambient humidity, preferably above 50 percent
- Tepid water baths containing bath oils, with liberal application of emollient ointments
- Wool and other potentially irritating fabrics should be avoided

PSORIASIS SYNDROMES

THE PSORIASIS SYNDROMES

- Affects 1.5% to 2% of the population
- Hereditary disorder
- AGE: one-third of patients before the age of 20, usually female
- GENDER: After age 20, equal incidence
- ETIOLOGY: Inflammatory changes in dermis "trigger" keratogenous changes in epidermis; Koebner's Phenomenon

PSORIASIS SYNDROME SYMPTOMS



- **SKIN:**
 - Pruritis, fever, "acute illness" symptoms
 - Silvery-white scaling, pustules, erythema
 - Salmon-pink skin, bilateral, asymmetrical
- **NAILS:**
 - Pitting, onycholysis,
 - "Oil spot" (pathognomonic): yellow spot under the nail plate

PSORIASIS SYNDROME SYMPTOMS

- ARTHRITIS: Varies from 1% to 32%
- Two types:
 - Seronegative and without subcutaneous nodules, involving terminal interphalangeal joints of hands and feet
 - Mutilating psoriatic arthritis with bone erosions and osteolysis and, ultimately, ankylosis; especially involving the sacroiliac, hip, and cervical areas
 - Seen especially with erythrodermic and pustular psoriasis

PSORIASIS SYNDROME DIFFERENTIALS

- Seborrheic dermatitis
- Lichenification
- Candidiasis
- Drug eruptions
- Glucagonoma syndrome (malignant tumor of pancreatic islet cells)

PSORIASIS SYNDROME COURSE AND PROGNOSIS

- Varied courses/prognoses:
 - Can be prolonged, frustrating, resistant to treatments
 - Can resolve spontaneously without treatment
 - Can resolve/relapse frequently

PSORIASIS SYNDROME MANAGEMENT AND TREATMENT

- Difficult to generalize
 - Depends on type of psoriasis, state of disease, extent of disease, the site, age of patient and degree of disability

PSORIASIS SYNDROME MANAGEMENT AND TREATMENT

- Instruct the patient that he should never rub or scratch the lesions; this stimulates the psoriatic proliferative process
 - Koebner's phenomenon
- UVA/UVB phototherapy or judicious sun exposure is often helpful

PSORIASIS SYNDROME MANAGEMENT AND TREATMENT

- Topical corticosteroids in ointment base applied after removing the scales by soaking in water. The ointment is applied to the wet skin, covered in plastic wrap, and left on overnight.
- During the day, corticosteroid creams can be used without occlusion.
- CAVEAT: Patients can develop tolerance to treatment, and prolonged application of certain corticosteroids (fluorinated) can lead to skin atrophy and telangiectasia.

SCALING ERUPTIONS OF UNKNOWN ORIGIN

SCALING ERUPTIONS OF UNKNOWN ETIOLOGY

- SEBORRHEIC DERMATITIS: offered as a differential for eczema and psoriasis
- AGE: Infancy, puberty, usually between 20 and 50 years of age
- GENDER: More common in males
- ETIOLOGY: No etiologic organism known; no change in sebum composition;
- Diet, alcohol, emotions may play a role

SEBORRHEIC DERMATITIS SYMPTOMS



- White or yellowish-red, often greasy, scaling macules and papules of varying size
- "Weeping" is common with ear and scalp
- Sites of predilection: Scalp, beard, face, trunk, body folds

SEBORRHEIC DERMATITIS DIFFERENTIALS

- Eczema
- Psoriasis
- Candidiasis

SEBORRHEIC DERMATITIS COURSE AND PROGNOSIS

- Recurrences and remissions, especially on the scalp
- Infantile seborrheic dermatitis disappears
- Adolescent seborrheic dermatitis lesions disappear with age

SEBORRHEIC DERMATITIS MANAGEMENT AND TREATMENT

- SCALP: Shampoo with selenium sulfide and zinc pyrithione
- FACE: Hydrocortisone cream or creams containing 2% to 3% sulfur

LUPUS SYNDROMES

SYSTEMIC LUPUS ERYTHEMATOSUS (SLE)

- AGE: 30 (females); 40 (males)
- RACE: More common in blacks
- GENDER: Male/Female ratio 1:8
- ETIOLOGY: Serious multi-system disease that involves connective tissue and blood vessels; tissue injury results from deposition of immune complexes at the epidermal-dermal junction (IgG & IgM granular or globular pattern); can be drug-induced

LUPUS (SLE) SYMPTOMS



- SKIN: (Common sites are the hands and face)
 - Erythematous, macular butterfly eruption on face with fine scaling
 - Erythematous, discrete, papular or urticarial lesions on face and arms
 - Bullae, often hemorrhagic

LUPUS (SLE) SYMPTOMS

- HAIR:
 - Discoid lesions associated with patchy alopecia
 - Diffuse alopecia
- Mucous Membranes:
 - Ulcers arising in necrotic lesions on palate (80%), buccal mucosa, or gums

LUPUS (SLE) SYMPTOMS

- EXTRACUTANEOUS MULTISYSTEM INVOLVEMENT
 - Arthralgia or arthritis (15 %)
 - **Renal disease (50 %)**
 - Pericarditis (20 %)
 - **Lymphadenopathy (50 %)**
 - Peripheral neuropathy (14 %)
 - Pneumonitis (20 %)
 - Hepatomegaly (30 %)

LUPUS (SLE) DIFFERENTIALS

- Photodermatosis (e.g., due to drugs)
- Rosacea
- Seborrheic dermatitis

LUPUS (SLE) COURSE AND PROGNOSIS

- SLE: 5 year survival rate of 93 %

LUPUS (SLE) MANAGEMENT AND TREATMENT

- General: Rest; avoidance of sun exposure
- Prednisone:
 - CNS involvement
 - Renal involvement
 - Severe illness without CNS or renal involvement

CHRONIC DISCOID LUPUS ERYTHEMATOSUS (CDLE)

- AGE: Twenty to forty-five years
- RACE: May be more severe in blacks
- GENDER: Females
- ETIOLOGY: Unknown

CDLE SYMPTOMS



- Sharply margined, scaly, atrophic, red plaques, usually occurring on exposed areas
- Early: Papules and plaques with scaling
- Later: Atrophy and depression of lesions, erythema, follicular plugging
- Hair: alopecia with scalp lesions

CDLE DIFFERENTIALS

- Systemic lupus erythematosus (SLE)
- Rosacea
- Psoriasis
- Tinea

CDLE COURSE AND PROGNOSIS

- 1% to 5% will develop SLE
- Complete remission occurs in 40%

CDLE MANAGEMENT AND TREATMENT

- Sunscreens
- Topical corticosteroids

METABOLIC AND HERITABLE DISORDERS

XANTHOMA

- A xanthoma is a macrophage containing droplets of lipids. A xanthoma may be a symptom of a general metabolic disorder or local cell dysfunction.
- Two classifications:
 - Xanthomas due to hyperlipoproteinemia
 - Normolipoproteinemic xanthomas

XANTHOMA

- Normolipoproteinemic xanthoma
 - Xanthelasma Palpebrarum (eyelid xanthoma)
- Hyperlipoproteinemic xanthoma
 - Primary: usually genetically determined
 - Secondary: severe hypothyroidism, biliary cirrhosis, diabetes

XANTHELASMA PALPEBRARUM

- AGE: Fifty years; children or young adults, rarely, if associated with primary or secondary
- GENDER: Equal incidences
- ETIOLOGY: May or may not be related to hyperlipoproteinemia; an marked elevation of LDL is a sign of hyperlipoproteinemia

XANTHELASMA PALPEBRARUM SYMPTOMS



- Soft, yellow-orange plaques, localized to the eyelids

XANTHELASMA PALPEBRARUM DIFFERENTIALS

- Early lesions can be confused with milia

XANTHOMA TENDINOSUM SYMPTOMS



- Yellow subcutaneous tumors on the extensor tendons of the digits, varying from round to longitudinal
- Tumors may be located in the Achille's tendon and tendons of the feet or hands

XANTHOMA TUBEROSUM SYMPTOMS



- Yellowish-purple nodules located especially on the elbows and knees

XANTHOMA ERUPTIVUM SYMPTOMS



- Discrete papules and dome-shaped nodules with yellow center and red halo; may be tender
- Distribution is common over buttocks, elbows, knees and back
- **CHARACTERISTICALLY ASSOCIATED WITH DIABETES MELLITUS**

XANTHOMA STRIATUM PALMARE SYMPTOMS



- Yellow-orange, flat or slightly elevated infiltrations of the creases of the palms and fingers

XANTHOMA COURSE AND PROGNOSIS

- If due to hyperlipoproteinemia, atherosclerotic cardiovascular disease (ASCVD), peripheral vascular disease and claudication are possible.

XANTHOMA MANAGEMENT AND TREATMENT

- Trichloroacetic acid application to the lesions (lesions may return)
- Dietary changes if due to hyperlipoproteinemia (low carbohydrate, low caloric diet and abstinence from alcohol)

VITILIGO

- AGE: Infancy to elderly; peak incidence is 10 to 30 years
- GENDER: Female predominance
- RACE: More noticeable in darker skins but not an increased incidence
- ETIOLOGY: Familial history in 30 percent of patients; physical trauma (Koebner's, severe sunburn) can precipitate

VITILIGO SYMPTOMS



- Loss of melanin resulting in sharply marginated, pure white areas of the skin
- Can be focal (isolated areas), segmental (quasidermatomal), generalized (multiple macules), or universal (total loss of melanin in all the skin, most of the hair, but not the eyes)
- HAIR: areas of hypopigmentation (patches)

VITILIGO DIFFERENTIALS

- Lupus erythematosus
- Pityriasis alba (not sharp margins, scaling)
- Tinea versicolor
- Leprosy
- Chemical leukoderma (exposure to germicides)

VITILIGO COURSE AND PROGNOSIS

- Only 5 % spontaneous repigmentation and usually only within a few macules

VITILIGO MANAGEMENT AND TREATMENT

- Topical corticosteroids are occasionally effective in small macules
- For older patients (over 50), deliberate depigmentation of the skin is treatment of choice
- For severe disfigurement, UVA phototherapy is highly effective (70% of patients have repigmentation)

Ichthyosis Vulgaris

- AGE: Not congenital; develops in 1 to 4 years
- GENDER: Equal incidences
- ETIOLOGY: Unknown, but occurs in 1 out of 300 people; familial history is common

ICHTHYOSIS VULGARIS SYMPTOMS



- Xeroderma (dry skin) with fine white scaling; normal skin color, but fish-scale pattern
- Follicular keratosis
- Increased number of creases in palms and soles
- Diffuse involvement, especially shins, arms, back (spares the axillae and fossae)

ICHTHYOSIS VULGARIS COURSE AND PROGNOSIS

- May show improvement in the summer and in adulthood

ICHTHYOSIS VULGARIS MANAGEMENT AND TREATMENT

- Hydration plus emollients
- Urea-containing lotions and ointments are beneficial

BENIGN NEOPLASMS

CLASSIFICATIONS OF SUN-REACTIVE SKIN (CAUCASIAN)

- SKIN TYPE I: Always burns, never tans
- SKIN TYPE II: Usually burns, tans less than average (with difficulty)
- SKIN TYPE III: Sometimes mild burn, tans about average
- SKIN TYPE IV: Rarely burns, tans with ease

SEBORRHEIC KERATOSIS

- AGE: Rarely before age 30
- RACE: Uncommon in blacks and dark pigmented people
- GENDER: Slightly more common in males
- ETIOLOGY: Autosomal dominant trait

SEBORRHEIC KERATOSIS SYMPTOMS



- Early: Small, 1 to 3 mm papule or plaque with or without pigmentation; "thimble"
- Later: Plaque with warty surface and "stuck-on" appearance
- Distribution: Scattered, over face, trunk, upper extremities
- Rarely pruritic

SEBORRHEIC KERATOSIS DIFFERENTIALS

- Early lesions can be confused with:
 - Solar lentigo
 - Basal cell carcinoma
 - Malignant melanoma

SEBORRHEIC KERATOSIS MANAGEMENT AND TREATMENT

- Cryotherapy and electrocautery will permit removal of the lesion, but lesions frequently recur

SOLAR LENTIGO

- AGE: Usually over 40 years, but may occur at 30 in sunny climates
- RACE: Most common in Caucasians
- GENDER: Equal incidences
- ETIOLOGY: Generally correlated with Skin Types I and II and duration and intensity of sun exposure

SOLAR LENTIGO SYMPTOMS



- Light yellow, light brown, or dark brown macule, 1-5 cm
- Not uniform in color
- Round or oval with slightly irregular border
- Distribution pattern is exclusively exposed areas: face, nose, dorsa of hands and forearms, upper back

SOLAR LENTIGO DIFFERENTIALS

- Seborrheic keratosis in early stages (epidermal change is barely perceptible in early seborrheic keratosis)
- Lentigo maligna is a pre-malignant dark brown lesion with flecks of black

SOLAR LENTIGO MANAGEMENT AND TREATMENT

- Liquid nitrogen may be used for cosmetic treatment

COMMON MELANOCYTIC NEVOCELLULAR NEVI (MOLES)

- AGE: Appear in early childhood and reach a maximum in young adulthood
- RACE: Primarily in Caucasians, but infrequent in very fair-skinned; rare in Blacks and darker-pigmented people

CMNN (MOLES) SYMPTOMS



- Small (less than 1.5 cm), circumscribed, acquired pigmented macules or papules comprised of groups of melanocytes
- Asymptomatic, but if a lesion becomes tender or pruritic, it can be an early indication of malignant change

CMNN (MOLES) CLASSIFICATIONS

- According to melanocyte clusters:
 - Junctional Melanocyte: at dermal-epidermal junction, above the basement membrane
 - Dermal Melanocyte: exclusively in the dermis
 - Compound Melanocyte: combination of junctional and dermal

CMNN (MOLES) DIFFERENTIALS

- Hemangioma
- Melanoma
- Seborrheic keratosis

CMNN (MOLES) COURSE AND PROGNOSIS

- Gradual disappearance of nevi by age 60 (except dermal classification of nevi)

CMNN (MOLES) MANAGEMENT AND TREATMENT

- Observe and monitor
- Indications for removal:
 - Site: scalp, soles, mucous membranes, anogenital area or any area exposed to trauma
 - Color: variegated
 - Border: irregular borders present
 - Symptoms: itching, bleeding or tenderness of the lesion
 - Criteria based on risk of dysplasia, the precursor for malignant melanoma

HALO NEVUS (SUTTON'S LEUKODERMA ACQUISITION CENTRIFUGUM)

- AGE: First 3 decades
- RACE: Equal incidence
- GENDER: Equal incidence
- ETIOLOGY: In patients with vitiligo, 1% to 50% have familial history

HALO NEVUS SYMPTOMS



- Brown nevus with halo of sharply marginated hypomelanosis

HALO NEVUS DIFFERENTIALS

- Melanoma with leukoderma
- Neurofibroma

HALO NEVUS COURSE AND PROGNOSIS

- 3 Stages of Development:
 - 1. Development (months) of halo around existing nevus
 - 2. Disappearance (months to years) of nevus
 - 3. Repigmentation (months to years) of halo

HALO NEVUS MANAGEMENT AND TREATMENT

- Observe and monitor

PREMALIGNANT AND MALIGNANT LESIONS

SOLAR KERATOSIS (ACTINIC KERATOSIS)

- AGE: Middle age, rarely occurs under 40
- RACE: Almost exclusively in Caucasian Skin Types I-III
- GENDER: More common in males, outdoor workers, outdoor sportspeople
- ETIOLOGY: Prolonged exposure to UVB rays leads to damage of keratinocytes

SOLAR KERATOSIS SYMPTOMS



- Single or multiple, dry, rough, adherent scaly lesions on sun-exposed skin.
- Scales are removed with difficulty and pain
- Scales are skin-colored or yellow-brown

SOLAR KERATOSIS DIFFERENTIALS

- Discoid Lupus Erythematosus
- Squamous Cell carcinoma

SOLAR KERATOSIS COURSE AND PROGNOSIS

- May spontaneously disappear, but usually remain for years
- The incidence of squamous cell carcinoma in preexisting keratosis is unknown

SOLAR KERATOSIS MANAGEMENT AND TREATMENT

- UVB sunscreens applied daily to face, ears and any exposed skin
- Nodular lesions should be excised
- Most solar keratosis react to application of 5% fluorouracil cream

BASAL CELL CARCINOMA

- AGE: Over age 40
- RACE: Very rare in darker pigmented skin
- GENDER: Slightly higher incidence in males
- ETIOLOGY: More common in Skin Types I and II and in Caucasians with prolonged intensive insolation

BASAL CELL CARCINOMA SYMPTOMS



- The most common form of skin cancer, frequently occurring on the face, but rarely metastasizing
- Usually an symptomatic papule or nodule, but ulceration can lead to frequent bleeding "rodent ulcer"
- Lesions are usually pink or red

BASAL CELL CARCINOMA DIFFERENTIALS

- Dermal melanocytic nevi
- Nodular malignant melanoma

BASAL CELL CARCINOMA COURSE AND PROGNOSIS

- An ulcer that does not heal in one month must be suspected of malignancy until proved otherwise by biopsy

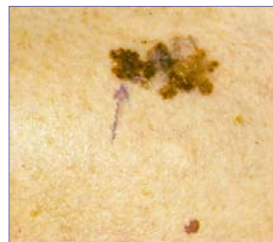
BASAL CELL CARCINOMA MANAGEMENT AND TREATMENT

- Refer for biopsy
- Surgical excision or radiotherapy
- 95% survival rate

LENTIGO MALIGNA AND LENTIGO MALIGNA MELANOMA

- AGE: Median age is 70
- RACE: Very rare in Asians, Native Americans, and Blacks; highest incidence in Caucasian Skin Types I-III
- GENDER: Equal incidence
- ETIOLOGY: Outdoor workers

LM AND LMM SYMPTOMS



- Irregular, variegated, brown to black macule that develops over time (months)
- If focal areas of papules develop, it signals invasion into the dermis-- this is now lentigo maligna melanoma (LMM)
- Distribution usually isolated to exposed areas: forehead, nose, cheeks, neck, forearms and dorsa of hands

LM AND LMM DIFFERENTIALS

- Superficial spreading melanoma

LM AND LMM COURSE AND PROGNOSIS

- If detected early, survival rate is high

LM AND LMM MANAGEMENT AND TREATMENT

- Observe and monitor
- Surgical excision

SUPERFICIAL SPREADING MELANOMA (SSM)

- THE MOST FREQUENTLY OBSERVED MELANOMA ARISING IN THE SKIN
- AGE: Median age is 47
- RACE: Highest incidence in Caucasians
- GENDER: Equal incidence

SSM ETIOLOGY

- SSM is the “new” neoplasm of post WWII (has increased sixfold since 1945). The increase is seen mostly in young professionals working indoors who receive intermittent intense sun exposure (“weekend warriors”) or people from Northern Latitudes who sun near the equator during the winter (“snowbirds”)
- 50 % or more of SSM arise in preexisting nevi

SSM SYMPTOMS



- Black, brown, or red flattened papules or plaques that develop one or more nodules; sites of predilection are upper back, face, lower legs (females) and other frequently sun-exposed areas

SSM DIFFERENTIALS

- Hemangioma
- Lentigo maligna or lentigo maligna melanoma

SSM COURSE AND PROGNOSIS

- If detected early, survival rate is high

SSM MANAGEMENT AND TREATMENT

- Observe and monitor
- Excision of the lesion