



INTRODUCTION TO DERMATOLOGY

BY: DR. T MUNYAO

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OUTLINE: CLERKSHIP FORMAT OF A PATIENT WITH SKIN LESIONS

- Objective: Clinical evaluation of skin lesions
- Pertinent lesional history
- Other presenting complaints
- Diagnostic formulation
- Plan of management

DERMATOLOGY

- Definition of dermatology
 - ▣ 'Derm' → skin
 - ▣ 'Logos' → science
- Multidisciplinary → inclusive of applied basic
 - ▣ Sciences devoted to anatomy, physiology and pathology of the skin.

CLINICAL EVALUATION OF SKIN LESIONS

1. **Physical primary lesions** → they have a high predictive value

- ▣ Lesional morphology

- ▣ Macule, patch, papule, wheal, nodule, tumor, comedone, vesicle, bulla, pustule, furuncle, erosion, excoriation, ulcer, atrophy, sclerosis, cyst, eczema

- ▣ Color

- ▣ Shape

- ▣ Surface characteristics

- ▣ Margins

- ▣ Arrangement

- ▣ Configuration

- ▣ Cutaneous component

- ▣ Anatomical distribution

- ▣ Special anatomical areas

- ▣ Hair, nails, mucous membranes, palms, soles and genitals

2. **Secondary lesions**

- ▣ Crust, scar, lichenification

DIFFERENT TYPES OF LESIONS

COLOR CHANGE IN THE SKIN

- **Color change in the skin** from the normal is determined from the racial background and the anatomical part of the body by virtue of environmental exposure
- The lesion may be de-pigmented, hyper-melanotic (black or brown), erythematous or may have different colors.
- A mixture of more than 1 type of lesion is common e.g. maculo-papular eruption
- Site the lesion and measure it.
- An area of color change < 2 cm → **MACULE**
- An area of color change > 2 cm → **PATCH**
 - ▣ If precipitated and aggravated by drug ingestion e.g. septrin → **fixed drug eruption**

SOLID ELEVATED LESIONS

- **Solid elevated lesions** are very soft at the center e.g. in Reclinghausen's disease (also associated with **Café au lait spots**)
- < 5mm in diameter → **PAPULE**
- 5 mm – 5 cm → **NODULE**
- > 5cm → **TUMOR** (not applied in the context of malignant potential)
- **Verruca Vulgaris/ Common warts**
 - ▣ Well defined papules and nodules
 - ▣ Surface is velvet-like
 - ▣ Usually caused by HPV
 - ▣ This is an OI therefore evaluate for an immunosuppressive state e.g. DM, AIDs
- **Basal carcinoma in albinism** → lack of melanin predisposes to malignant transformation of skin lesions due to UV light damage.
 - ▣ Papules and nodules with **crusting** on the surface
- **Keloids** arise from a scar
- **Cutaneous T cell lymphoma** (a malignant tumor due to NHL) → Ulcerating nodules
- **Kaposi's Sarcoma** → hemorrhagic tumors with hyper-proliferation of blood vessels. They are AIDs-defining

PLAQUES

- **Slightly raised** lesions (about 1-2 mm) above the skin with a large surface area and variable surface characteristics e.g. scaling, erythema.
- They may or may not be well-defined.
- These are characteristic lesions in Papulo-squamous disorders (Psoriasis vulgaris).
- Variants of psoriasis (it is currently defined as a systemic disease with cutaneous manifestations)
 - ▣ Stable etc.

FLUID-FILLED LESIONS

- Clear fluid in raised lesion
 - ▣ < 5 mm → vesicle
 - ▣ > 5 mm → Bulla (*pl. bullae*) e.g. in **pemphigus vulgaris**
 - Therefore, **vesico-bullous/blistering diseases** present with fluid-filled lesions of different sizes.
- Grouping of vesicles → **herpetiform configuration**
 - ▣ This is the hallmark of **Herpes Virus Infection**
- If the grouping follows a dermatomal pattern → **zosteriform configuration**
 - ▣ Therefore Herpes Zoster is a condition with herpetiform lesions in a zosteriform pattern 😊
- **Erosions** → lesions that accrue from removal of the blister (epidermal deficit)
- Crust → debris of protein and other cellular material after the fluid has evaporated or the exudate has dried.
- Varicella/ Chicken pox
 - ▣ Erythematous papules, umbilicated with fluid at the tip
 - ▣ Pustules → contain pus
 - ▣ Tendency to grouping of the lesions

EPIDERMOID CYST

- Fluid-filled lesion containing a paste/ semi-solid material.
- Occlusion of a sebaceous gland.

TOXIC EPIDERMAL NECROLYSIS

- There is extensive epidermal necrolysis with detachment.
- Usually a manifestation of a drug reaction.
- It is related to SJS
- There is **blistering, vesicular** eruption, mucositis, epidermal detachment, targetoid lesions etc.
- Mortality is related to infections, fluid loss and thermoregulatory abnormalities.
- If prompt diagnosis is made, management is symptomatic and should be accurate:
 - ▣ Fluid replacement
 - ▣ Infection control

ANGIO-NEUROTIC EDEMA

- Swollen, itchy lips
 - ▣ E.g after ingestion of penicillin
- Related to urticarial
- There is mast cell release of vasoactive amines → VD → edema

CONTACT DERMATITIS

- May present as pruritus and fissuring of the palms in a person who washes clothes most of the time for instance

ACUTE ECZEMA

- Acute inflammatory condition, with erythema, vesicles, itching and a lot of exudation
- Eczema may be endogenous due to host factors or **exogenous** due to external factors e.g. foot wear

HYPERMELANOSIS

- This is an example of photo-dermatosis that may occur due to sensitization by products that are activated by exposure to UV light.
- The lesions are characterized by inflammation in sun-exposed areas.
- Diseases that present with photosensitivity:
 - ▣ Collagen vascular disease
 - ▣ SLE
 - ▣ Pellagra

ERYTHRODERMA

- Generalized erythema and scaling
- May be exfoliative
- It is associated with:
 - ▣ Psoriasis (erythrodermic psoriasis)
 - ▣ Blistering disease
 - ▣ Adverse drug reaction (there is a criteria for attributability)

SCLERODERMA

- Very hard and fixed skin.
- One of the collagen vascular diseases with marked collagenesis in the dermis.
- Localized sclerosis → **Morphoea**
- Has systemic manifestations

SQUAMOUS CELL CARCINOMA

- **Ulcer with crusting on the surface that is chronic and non-healing with induration in the periphery.**

PERTINENT LESIONAL HISTORY

- Duration
- Evolution
- Anatomical spread
- Associated with pruritus
- Therapy (pre-, post-) onset
- Atopy (asthma, allergic conjunctivitis etc.)
- Exposure
- Hypersensitivity states
- Travel in the recent past

OTHER

- PC
- HPC
- PMH
- FSH
- Occupational history
- Systemic enquiry
- Diagnostic formulation of the cutaneous plus other manifestation which may be systemic
 - ▣ **Lesional characteristics** are the basis of diagnosis for the clinician
 - ▣ Diseases with similar lesions → clinical syndromes
 - ▣ Clinical and relevant pathological criteria define each specific disease in a clinical syndrome.

DERMATOLOGICAL SYNDROMES

- Geno-dermatoses e.g. albinism, neurofibromatosis
- Infections
- Eczema
- Vesico-bullous diseases
- Papulo-squamous disorders
- Adverse drug eruption
- Cutaneous neoplasms



TYPED BY EFFIE NAILAH

**DON'T LET BEING RIGHT TALK YOU OUT OF BEING
KIND. 😊**