

# Dermatology / Introduction

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BY

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# Diagnosis

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Diagnosis in dermatology follows the standard approach of history taking and physical examination.



history taking



physical examination.

# History

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Questions relating to the **presenting dermatosis** should answer the following: time and site of onset; ensuing course; provoking and relieving factors (sunlight, temperature, occupation, and so on.) and associated symptoms (itch, pain, and so on.).

It is important to elicit a history of any **previous general medical or surgical problems** as well as details of **past dermatological conditions**.

A **past history of eczema or psoriasis** is of particular relevance.

**Enquiry into the occurrence of the common inherited dermatoses** (such as atopic eczema, psoriasis, or ichthyosis) in first degree relatives is useful, as is a **history of infectious illness** in close personal contacts.

# History

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Aspects of the **patient's daily life** are relevant to the diagnosis of many skin diseases: occupational or recreational contact with potentially sensitizing substances may be pertinent, as may a history of excess sun exposure.

A detailed **drug history** is mandatory.

A full list of **medications** taken for other conditions may reveal a possible culprit in iatrogenic skin disease, while knowledge of concomitant therapies may help to avoid drug interactions or polypharmacy. Current and past use of topical agents should be noted.

# Examination

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- ✓ The diagnosis of skin disease is dependent on careful examination and the correct interpretation of cutaneous physical signs.
- ✓ In addition to an inspection of the area(s) of involvement, a dermatological examination should include visual assessment of the whole skin.
- ✓ Adequate illumination is imperative, while additional torch-light may be required to examine the oral cavity.
- ✓ At times, a light source positioned obliquely to the lesions can reveal important morphological information.
- ✓ Closer inspection of individual lesions is often helpful and is facilitated by the use of a hand lens.

# Examination

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- ✓ Palpation of the lesional skin should always be undertaken to provide information on temperature, consistency, and level of tissue involvement.
- ✓ Examination of the regional lymph nodes is sometimes necessary.
- ✓ In order to extract the maximum amount of information for diagnostic purposes, four aspects of the lesion(s) under scrutiny need to be recorded:
  - Morphology.
  - Shape.
  - Distribution.
  - Colour.

# Morphology

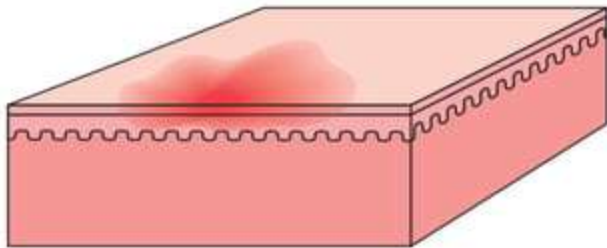
Most skin lesions have a characteristic morphology which, once defined, will narrow the differential diagnosis.

The following list describes the features of the common primary lesions:

- Macule.
- Papule.
- Nodule.
- Plaque.
- Wheal.
- Vesicle.
- Bulla.
- Pustule.
- Erosion.
- Ulcer.
- Fissure.
- Telangiectasia.
- Comedone.

# Macule

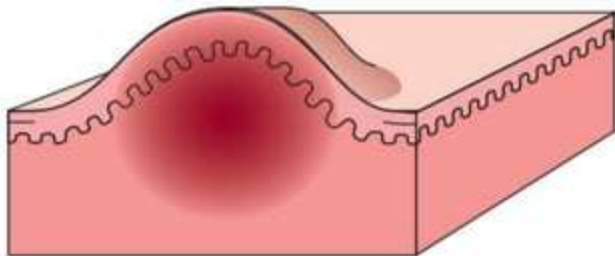
Macule – a flat, non-palpable lesion, distinguished from adjacent, normal skin by a change in colour.





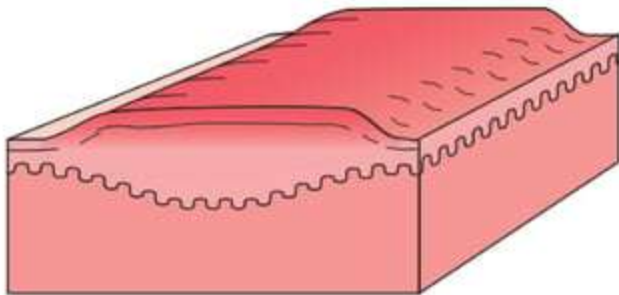
# Papule

Papule – a small, solid and raised lesion less than 5 mm in diameter). A raised lesion larger than 5 mm is a nodule.



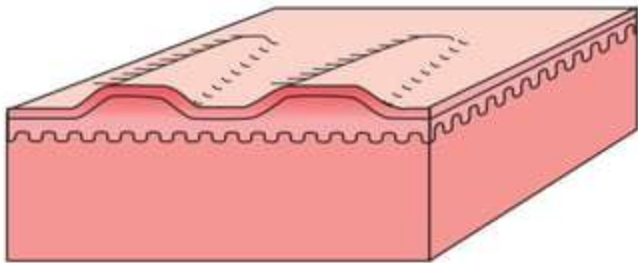
# Plaque

Plaque – a flat-topped lesion with a diameter considerably greater than its height.



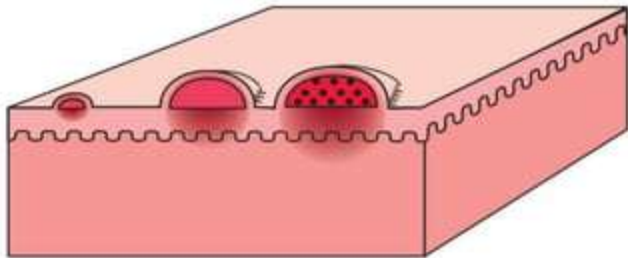
# Wheal

Wheal – a transient swelling of the skin of any size, often associated with surrounding, localized erythema (the flare).



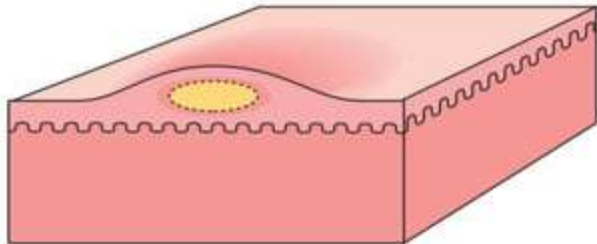
# Vesicle

Vesicle – a blister less than 5 mm in diameter. A blister greater than 5 mm in diameter is a bulla.



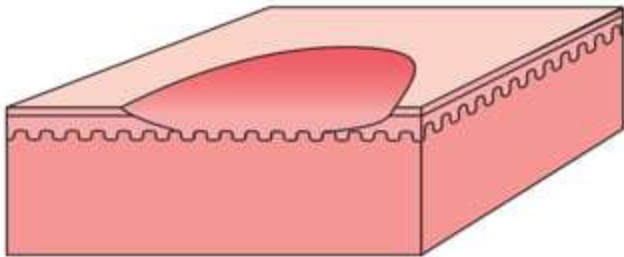
# Pustule

Pustule – a visible accumulation of pus, therefore white, yellow, or green in colour



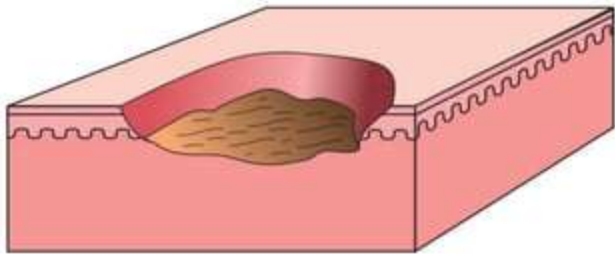
# Erosion

Erosion – an area of skin from which the epidermis alone has been lost.



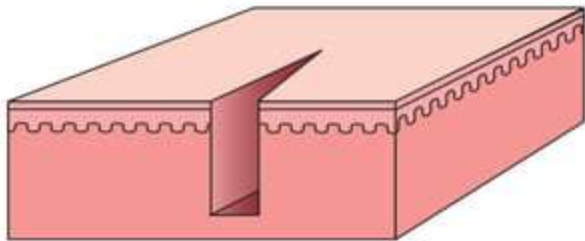
# Ulcer

Ulcer – an area of skin from which the epidermis and part of the dermis has been lost.



# Fissure

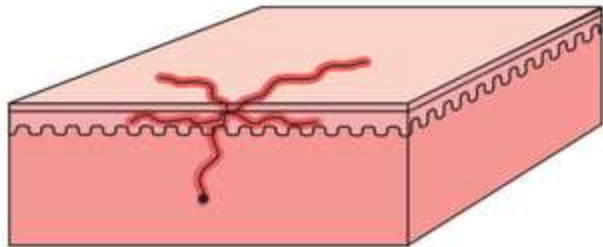
Fissure – a cleft-shaped ulcer.





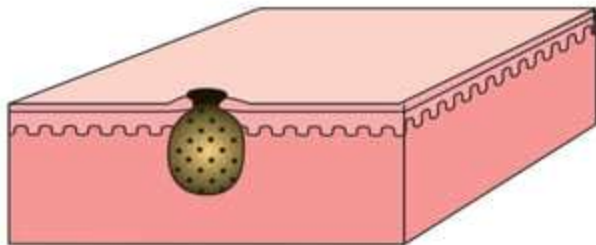
# Telangiectasia

Telangiectasia – a visibly-dilated, small, dermal blood vessel.



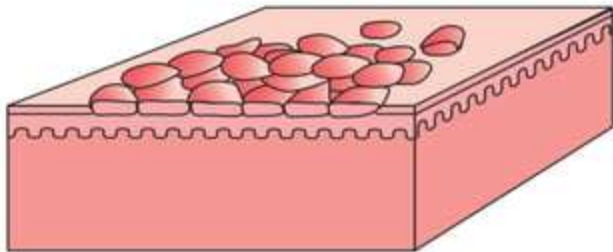
# Comedone

Comedone – accumulation of keratin and sebum lodged in dilated pilosebaceous orifice.



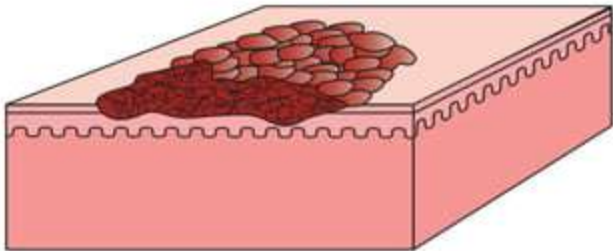
# Scale

Scale – a flake of keratinized epidermal cells lying on the skin surface.



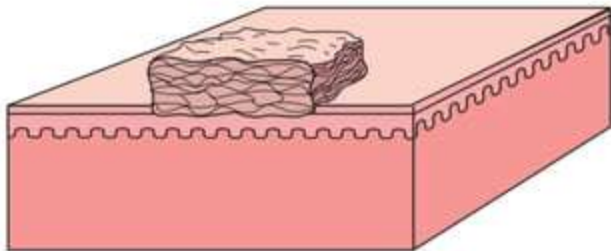
# Crust

Crust – dried serous or sanguineous exudate.



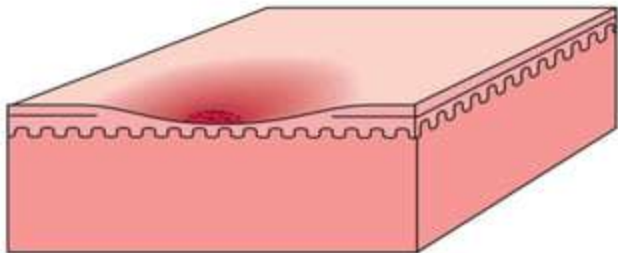
# Hyperkeratosis

Hyperkeratosis – an area of thickened stratum corneum.



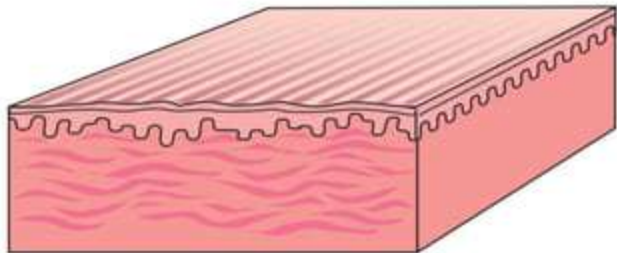
# Atrophy

Atrophy – thinning of the skin due to the partial loss of one or more of the tissue layers of the skin (epidermis, dermis, subcutis).



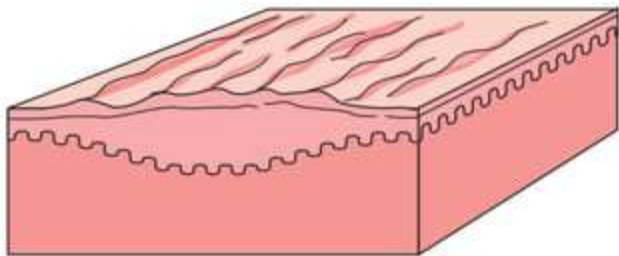
# Sclerosis

Sclerosis – hardening of the skin due to dermal pathological change (often an expansion of collagenous elements) characterized by induration.



# Lichenification

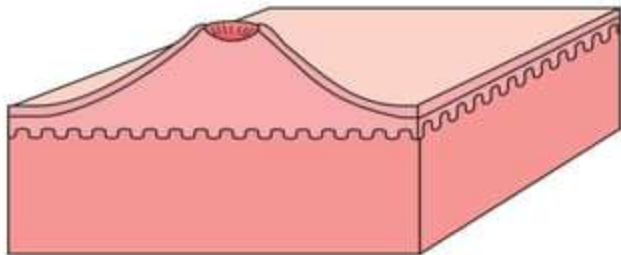
Lichenification – thickened skin with increased markings usually due to prolonged scratching.





# Umbilicated

Umbilicated – shaped like the umbilicus .



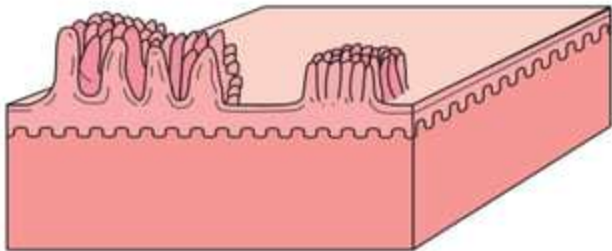
# Exudate

Exudate – material escaped from blood vessels with a high content of protein, cells, cellular debris, and so on.



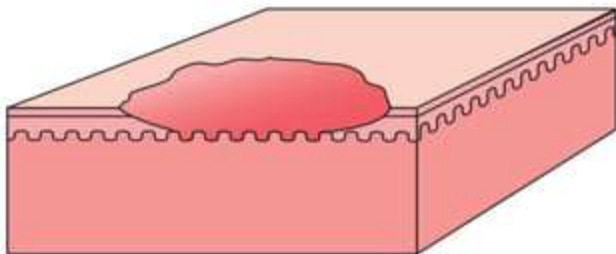
# Warty

Warty – horny  
excrescence.



# Excoriation

Excoriation – scratch or abrasion of the skin.



primary lesion can be associated with additional, superimposed features:

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• Scale.

• Crust.

• Hyperkeratosis.

• Atrophy.

• Sclerosis.

• Lichenification.

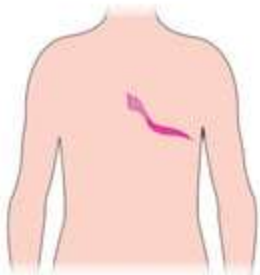
• Umbilicated.

# Shape

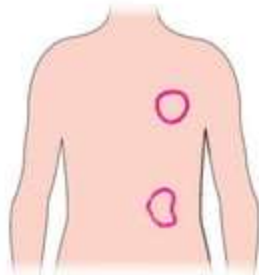
The shape of individual lesions has a clinical significance as certain dermatoses consist of lesions with a characteristic shape.

Commonly observed shapes or patterns are as follows:

- **Linear**,
- **Discoid** refers to a coin-shaped lesion.
- **Annular** describes a ring-shaped lesion.
- **Target** describes a lesion consisting of concentric rings.
- **Polycyclic** describes a pattern of interlocking rings.
- **Arcuate** describes lesions that are arc shaped.
- **Serpiginous** describes a linear lesion which is wavy in shape.
- **Whorled** is used to describe lesions which follow the developmental lines of Blaschko and demonstrate a curved or spiral pattern.
- **Digitate** refers to lesions which are fingerlike in shape.
- **Zosteriform** means resembling herpes zoster



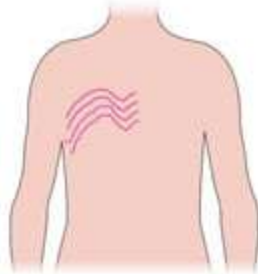
**Linear lesion**



**Annular lesion**



**Serpiginous lesion**



**Whorled lesion**

# Distribution

The majority of skin diseases have a characteristic distribution or a predilection for certain sites.

Other dermatoses vary in extent of involvement according to their severity.

The recognition of particular configurations is important diagnostically, while defining the extent of involvement is useful for prognostic and therapeutic reasons.

Discrete lesions occurring in a localized area are called grouped, while multiple lesions distributed over a wide area of skin are called scattered.



# Distribution

There are terms which define widespread distributions more exactly:

- Exanthem refers to a predominantly truncal eruption consisting of multiple, symmetrical, erythematous, maculopapular lesions. Such dermatoses (called exanthematous) can be further described as being either morbilliform (meaning measles-like, comprised of blotchy, pink, slightly elevated lesions) or scarlatiniform (meaning scarlet fever-like, comprised of tiny erythematous papules).
- Confluent describes the appearance of a coalescence of individual lesions to form a large area of involvement.
- Erythroderma implies that a particular dermatosis involves more than 90% of the body surface area and that the involvement is confluent.

# Distribution

The distribution of lesions can also be described according to regional involvement, the recognition of which can help pinpoint a diagnosis:

- Centrifugal – mostly affecting the extremities, e.g. granuloma annulare.
- Centripetal – mostly affecting the trunk, e.g. pemphigus vulgaris.
- Centrifacial – mostly involving the forehead, nose, and chin, e.g. rosacea.
- Palmoplantar – affecting the palms and soles, e.g. palmoplantar pustulosis.
- Flexural – involving the flexural skin, e.g. erythrasma.
- Extensor – involving the extensor skin, e.g. plaque psoriasis.
- Dermatomal – affecting the skin of one or more dermatomes, e.g. shingles (herpes zoster).
- Periorbital – distributed around the eyes, e.g. syringomata.
- Perioral – distributed around the mouth, e.g. perioral dermatitis.
- Light-exposed – involving the skin routinely exposed to sunlight, e.g. chronic actinic dermatitis.

# Colour

Cutaneous lesions can be flesh-coloured, demonstrate a change in pigmentation (hyper- or hypopigmentation), or be characterized by redness.

Erythema is redness due to microvascular dilatation which can be blanched by pressure.

Purpura is a darker cutaneous redness due to erythrocyte extravasation; purpura cannot be blanched by pressure.

# Outline of dermatological history

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History of present skin condition



General health at present



Past history of skin disorders



Past general medical history



Family history of skin disorders



Family history of other medical disorders



Social and occupational history



Drugs used to treat present skin condition



Drugs prescribed for other disorders

# Outline of dermatological history

## History of present skin condition

Duration, Site at onset, details of spread, Itch, Burning, Pain, (Wet, dry, blisters), Exacerbating factors, Growth, Bleeding

## General health at present

Ask about fever

## Past history of skin disorders

## Past general medical history

Inquire specifically about asthma and hay fever

## Family history of skin disorders

If positive, the disorder or the tendency to have it may be inherited. Sometimes family members may be exposed to a common infectious agent or scabies or to a injurious chemical

## Family history of other medical disorders

## Social and occupational history

Hobbies, Outdoor versus indoor, Travels abroad, Relationship of rash to work and holidays, Alcohol intake

## Drugs used to treat present skin condition

Topical, Systemic, Physician prescribed, Patient initiated

## Drugs prescribed for other disorders

*(including those taken before onset of skin disorder)*