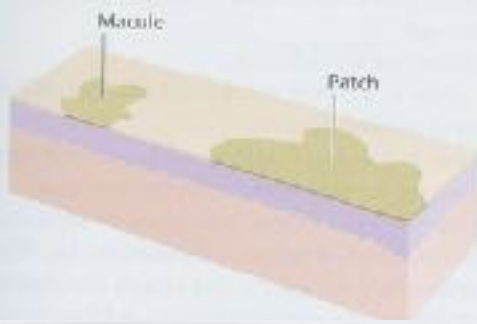


Dermatology in the Head and Neck

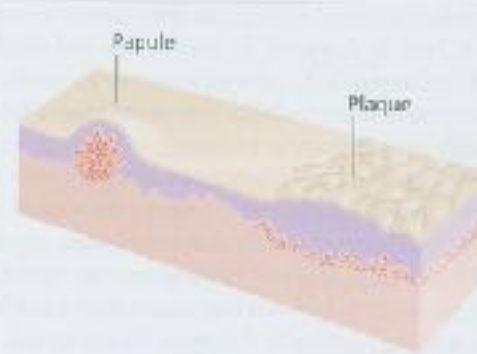
Dr. Suhail Al-Amad

19th Mar 2020



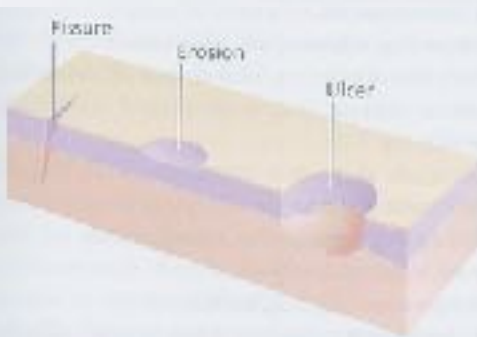
Macules: small flat area of altered colour or texture

Patch: large flat area of altered colour or texture



Papule: solid and raised lesion smaller than 1 cm

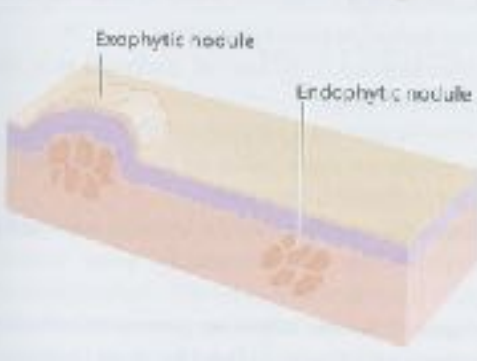
Plaque: solid and raised lesion larger than 1 cm (large papules)



Fissure: linear cut in the epithelium

Erosion: moist red lesion due to loss of the superficial epithelium

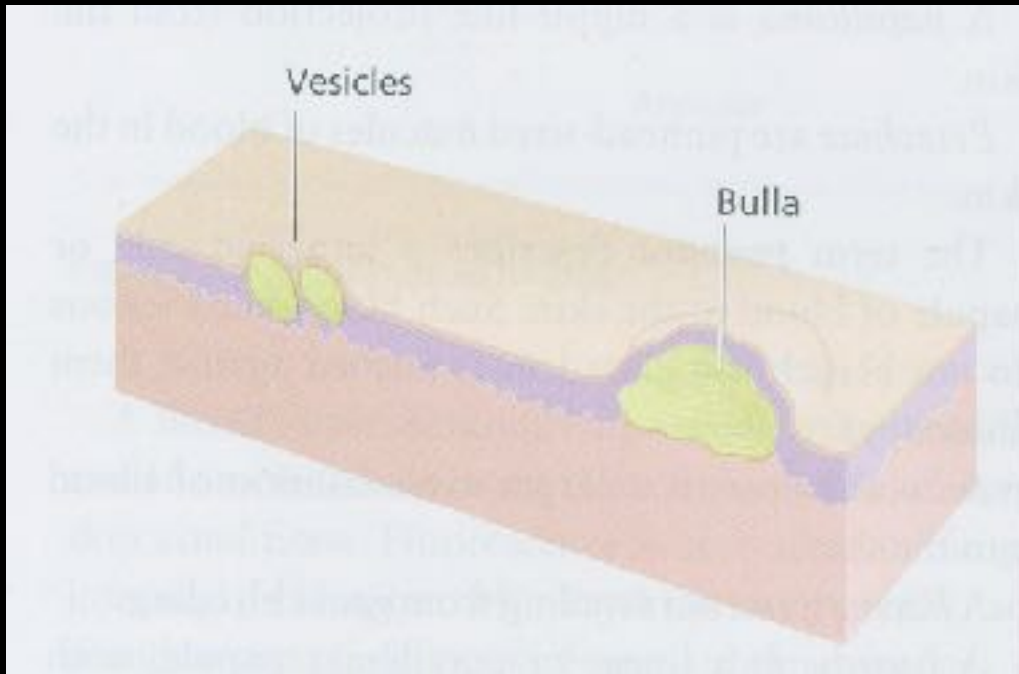
Ulcer: circumscribed depressed lesion over which the epithelium is lost



Nodule: lesion deep in submucosa, over-which the epithelium can be easily moved

Exophytic: growing upwards

Endophytic: growing downwards

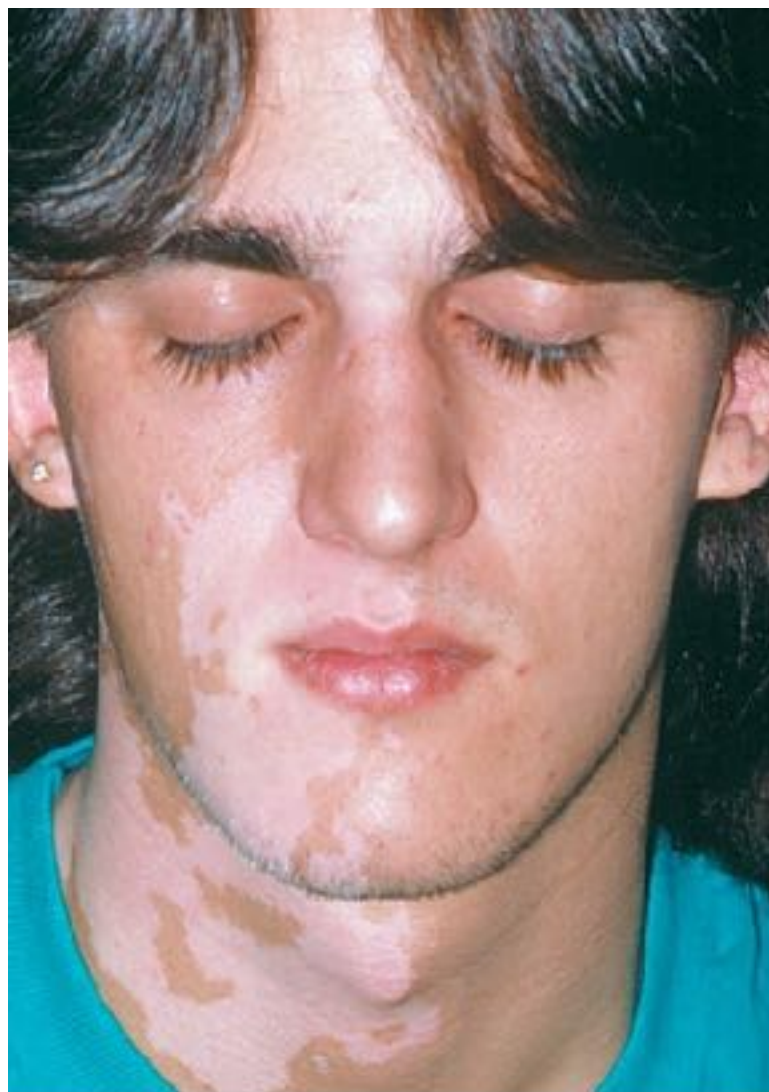


Vesicle: elevated blister containing clear fluid that is under 1 cm in diameter

Bullous: elevated blister containing clear fluid that is greater than 1 cm in diameter

Pustule: elevated lesion containing purulent material

Source: Clinical Dermatology. By Hunter et al 3rd ed. 2002



A

Source: Wolff K, Goldsmith LA, Katz SI, Gilchrist BA, Paller AS, Lefell DJ:
Fitzpatrick's Dermatology in General Medicine, 7th Edition: <http://www.accessmedicine.com>
Copyright © The McGraw-Hill Companies, Inc. All rights reserved.

Macules and Patches

- Vitiligo;
 - Melanocytes are destroyed either by autoimmune antibodies, or by chemicals (less common).
 - Clinically there are depigmented macules in areas that are frequently traumatized. Lesions are well-demarcated.
 - Course and severity vary widely.
 - Depigmented areas are at risk of sunburn and skin cancer.

Macules and Patches

- Vitiligo;
 - Treatment is difficult.
 - Sunblock to protect depigmented areas.
 - Tanning creams.
 - Skin grafts.



Image source:
[wikipedia.org](https://en.wikipedia.org/wiki/File:Acne_lesions.jpg)

Macules and Patches

- Ephelides (freckles);
 - Small (0.5cm) tan to brown macules.
 - On sun-exposed areas.
 - Predilection to fair individuals with red or blond hair.
 - There is a decrease in the number of melanocytes (1/3 less) but melanosomes are larger and greater in number than in normal skin.
 - No treatment is indicated. Sun protection prevents new ones.



Source: Wolff K, Johnson RA, Suurmond, D: *Fitzpatrick's Color Atlas & Synopsis of Clinical Dermatology*, 5th Edition: <http://www.accessmedicine.com>.

Copyright © The McGraw-Hill Companies, Inc. All rights reserved.

Macules and Patches

- Melasma
 - Also called “mask of pregnancy”.
 - Most cases are seen in pregnant women, or women on birth control pills.
 - 10% seen in men.
 - In pregnant women, it disappears several months after birth.
 - In women on contraceptives, persists.

Macules and Patches

- Melasma

- Well-demarcated, brown to greyish patches on face, mainly cheeks, forehead and upper lip (sun-exposed areas)
- Histologically, there is increase in number and activity of melanocytes in the epidermis, or increase number of melanin-laden macrophages.



Source: Fauci AS, Kasper DL, Braunwald E, Hauser SL, Longo DL, Jameson JL, Loscalzo J:
Harrison's Principles of Internal Medicine, 17th Edition: <http://www.accessmedicine.com>

Copyright © The McGraw-Hill Companies, Inc. All rights reserved.

Macules and Patches

- Solar lentigo
 - Similar to ephelides, but larger and darker.
 - Appear on sun-exposed areas.
 - Changes in size, thickness or color should alert clinicians for the possibility of malignant transformation (melanoma).
 - Histologically there is increase in melanocytes number and activity.
 - No treatment required except if there is concern of malignant transformation, or for cosmetic purposes.



Image source:
[wikipedia.org](https://www.wikipedia.org)

Macules and Patches

- Telangiectasia;
 - Permanently dilated blood vessels, tortuous, red or violet color.
 - Can be a manifestation of systemic disorders such as CREST syndrome (Calcinosis, Raynaud's, Eosophphageal constriction, Sclerodactyly, and Telangiectasia), SLE, HHT (Hereditary Haemorrhagic Telangiectasia), pregnancy and alcoholism.
 - No bleeding tendency, no treatment required.



Image source: skinsight.com

Macules and Patches

- Dermatitis;
 - Also called “eczema”.
 - Inflammatory reaction with varied clinical presentations:
 - Acute, pruritus, erythema, vesiculation, erosion, then ulcers and fissures
 - Chronic, pruritis, fissuring, scalling, lichenification
 - When the inflammatory reaction is related to a substance in contact with skin, contact dermatitis

Allergic contact dermatitis to nickel (in a trumpet)



Source: Wolff K, Jorizzo RA, Scharnau D, Dr. Fitzpatrick's Color Atlas & Synopsis of Clinical Dermatology, 5th Edition. In: Dermatology online. Copyright © The McGraw-Hill Companies, Inc. All rights reserved.

Allergic contact dermatitis to eosin (in a lipstick)



Source: Wolff K, Jorizzo RA, Scharnau D, Dr. Fitzpatrick's Color Atlas & Synopsis of Clinical Dermatology, 5th Edition. In: Dermatology online. Copyright © The McGraw-Hill Companies, Inc. All rights reserved.

Macules and Patches

- Allergic contact dermatitis;
 - Diagnosis by skin patch test.
 - Treatment;
 - Identifying and avoiding the allergen.
 - Corticosteroids if necessary (topical or systemic).
 - Immune-modulating agents (tacrolimus and cyclosporin).



Source: Wolff K, Johnson RA, Suurmond, D: *Fitzpatrick's Color Atlas & Synopsis of Clinical Dermatology*, 5th Edition: <http://www.accessmedicine.com>.

Copyright © The McGraw-Hill Companies, Inc. All rights reserved.

Macules and Patches

- Atopic dermatitis;
 - Severe form of dermatitis that is common.
 - Starts in infancy.
 - Positive family history of dermatitis, asthma, allergic rhinitis...etc.
 - Characterized by elevated IgE antibodies.
 - Allergens vary; dust mites, pollen, certain foods (eggs, peanuts, milk), exotoxins of bacteria (*S. aureus*), intracellular proteins, certain fabric and emotional stress.

Macules and Patches

- Atopic dermatitis;
 - Clinically, characterized by dry, scaly, itchy skin lesions.
 - Itching leads to rash, which will induce more itching...
 - Poorly demarcated lesions.
 - Skin is edematous, sometimes eroded and moist due to scratching.
 - Diagnosis depends on the history (infancy onset), distribution, and morphology.

Macules and Patches

- Management;
 - Stop scratching --> anti-pruritic agents.
 - Maintain clean skin to prevent secondary bacterial and viral infections.
 - Topical and systemic corticosteroids.
 - Topical and systemic antibiotics (when there is an infection).
 - Photochemotherapy.
 - Reduce stress.

Papules and Plaques

- Acrochordon (skin tags);
 - Soft, pedunculated papules
 - Seen around eyelids, neck and axillae.
 - No treatment required except if infarction develops (due to twisting --> compressing blood vessels) or for cosmetic reasons.



Image source:
sciencebasedmedicine.org

Papules and Plaques

- Fibrous papules;
 - Sessile, broad-based.
 - Epidermis --> hyperkeratosis, hyperplasia and flattening rete ridges.
 - Dermis --> abundant irregular collagen fibers, numerous fibroblasts, increase in blood vessels.
 - Treated by excision.



Image source:
wikipedia.org



Source: Wolff K, et al. in RA, S. (eds). *Fitzpatrick's Color Atlas & Synopsis of Clinical Dermatology*, 5th Edition. Ch. 12. www.accessmedicine.com

Copyright © The McGraw-Hill Companies, Inc. All rights reserved.



Source: Wolff K, et al. in RA, S. (eds). *Fitzpatrick's Color Atlas & Synopsis of Clinical Dermatology*, 5th Edition. Ch. 12. www.accessmedicine.com

Copyright © The McGraw-Hill Companies, Inc. All rights reserved.

Papules and Plaques

- Verruca Vulgaris;
 - Also called “common warts”;
 - Caused by HPV.
 - There are over 150 types of HPV.
 - 70% of HPV infections present as common warts.
 - Common, 20% of school children have skin warts.
 - Persistent, history being for years.
 - Small discrete benign papules which are hyperplastic and hyperkeratotic. Can coalesce, or be large plaques.
 - Surface is rough with vegetations and clefting. Red-to-brown dots are pathognomonic , represent thrombosed loops.

Papules and Plaques

- Verruca Vulgaris;
 - The extent of warts depend on the immune-status.
 - Transmission is through skin-skin contact.
 - Breach in stratum corneum and immune-suppression increase the risk of infection.
 - Occur at sites of recurrent trauma: hands, fingers, knees...etc.
 - Spontaneous resolution is part of its natural history.
 - Treatment options includes salicylic acid creams, hot water baths, cryosurgery, electrosurgery.

Papules and Plaques

- Xanthelasma;
 - Yellow papules, mainly seen in the upper eyelid
 - Can be a sign of hyperlipidemia
 - Histologically characterized by lipid-laden macrophages in the upper dermis
 - No treatment required



Source: Wolff K, Johnson RA, Suurmond, D: *Fitzpatrick's Color Atlas & Synopsis of Clinical Dermatology*, 5th Edition: <http://www.accessmedicine.com>.

Copyright © The McGraw-Hill Companies, Inc. All rights reserved.

Papules and Plaques

- Basal cell carcinoma BCC
 - The most common form of skin cancer.
 - Occurs in skin that is sun-exposed, and has hair follicles, and in fair skinned individuals.
 - Most common site is the face, back of the neck and scalp (in bald people).
 - Presents as a papule or nodule with a central erosion.
 - Characterized by being slowly growing and hypopigmented pearly (translucent) appearance.

- Metastasis almost never occur.
- It is aggressive and locally destructive, and surgical treatment causes disfigurement.
- Death can result from haemorrhage due to erosion to major blood vessels.