



## MACULE

A macule is a flat lesion, even with the surface level of surrounding skin, perceptible as an area of color different from the surrounding skin or mucous membrane. Macules are non-palpable. Their shapes are varied and borders may be distinct or vague. Maculosquamous is a neologism invented to describe macules with fine non-palpable scaling, which may become apparent only after light scraping and scratching.

Perhaps the most important additional feature of a lesion other than primary morphology is color. Lesional color, which is often the first visual assessment made, is reliably reproducible with particular

types of pathologies, such as destruction of melanocytes, dilatation of dermal blood vessels, or inflammation of vessel walls with extravasation of red blood cells. As such, color provides meaningful insight into pathologic processes of the skin and facilitates clinical diagnosis. Pigmentary changes represent an important and common type of macular color change and

may be described as hyperpigmented (as in post-inflammatory hyperpigmentation), hypopigmented (as in tinea versicolor), or depigmented (as in vitiligo).

## **Implications of Color Changes in Altered Skin**

### **COLOR**

### **PATHOLOGY**

### **DIAGNOSTIC CONSIDERATION**

Apple jelly

Granulomatous inflammation

Tuberculosis, sarcoidosis, leishmaniasis

Black

Melanin, necrosis

Melanoma, purpura fulminans, calciphylaxis

Blue

Deep dermal pigment, reduced hemoglobin, tattoo, medication

Blue nevus, amiodarone

Brown

Melanin, hemosiderin, chronic inflammation, post-inflammatory, dried serum

Nevus, melasma

Copper

Inflammation with plasma cells

Secondary syphilis

Green

Deep hemosiderin, pyocyanin pigment, tissue eosinophilia

*Pseudomonas* infection, tattoo, Wells syndrome

Grey

Deep melanin or other pigment deposition

Chloroquine toxicity, mongolian spot, erythema dyschromicum perstans

Lilac

Inflammation, dilatation of deep dermal blood vessels

Borders of evolving morphea, derma tomyositis

Orange

Granulomatous inflammation with histiocytes having abundant cytoplasm

Juvenile xanthogranuloma

Pearly

Epidermal proliferation without surface keratin

Basal cell carcinoma

Pink

Acute inflammation, dilatation of superficial dermal blood vessels, hemorrhage

Eczema

Red

Hemorrhage, acute inflammation, dilatation of blood vessels

Psoriasis, drug eruptions

Salmon pink

Inflammation with involvement of epidermis, dilatation of blood vessels inflammation with edema

Pityriasis rubra pilaris, psoriasis, urticaria

Violet

Hemorrhage, deep hemosiderin, lichenoid inflammation

Lichen planus, Kaposi sarcoma

White

Reduced or absent melanin synthesis, post-inflammatory

Tinea versicolor, albinism, vitiligo

Yellow

Superficial staphylococcus or streptococcus infection mixed with keratinized cells, carotenoids, hemosid

Impetigo, xanthomas, sebaceous hyperplasia, necrobiosis lipoidica diabetorum, jaundice