Primary and Secondary Efflorescences

The essence of dermatology is the detailed description of skin changes (efflorescences). The categorization of efflorescences provides a logical system which helps orientation. Once this principle is acquired, you can easily and accurately describe a great amount of skin findings and do not only find approval in the field of dermatology. Here, you learn about the basics of efflorescences.

Primary and Secondary Efflorescences

Efflorescences are changes of the skin. **Primary efflorescences** are skin chances which directly result from the pathological change of the skin. Examples for primary efflorescences are maculae (spots) or tumors. **Secondary efflorescences** can develop in the course of pathological skin changes or due to external influences. Examples for secondary efflorescences are flakes and crusts (dried up secretion).

**Note:**

- Efflorescence = skin change
- Primary efflorescence: skin change directly resulting from the pathological process
- Secondary efflorescence: skin change on the basis of a primary efflorescence or via external damages
Primary Efflorescences

Macula (spot)

A macula is a circumscribed color change in the skin level without a difference in substance, which means that no difference in level can be palpated. Examples are freckles, café-au-lait spots, and vitiligo (skin depigmentation). Due to the different color of the skin, one can often conclude their genesis. Thus, white spots (= depigmentation) in can occur in the context of vitiligo. Red spots can develop due to increased circulation (hyperemia = erythema), and brown spots due to incorporation of melanin. A large macular lesion > 2 cm in diameter is referred to as a Patch.

Papula (Papule), Nodus and Plaque

A papula is a small, circumscribed elevation. Its diameter is less than 0.5 cm. These nodules can develop from an increase in substance of both the dermis and the epidermis. A nodus ranges from 0.5 cm to 5 cm, of firm consistency, and can reach into deeper layers of the dermis. A plaque is a real increase in tissue flat-topped, raised lesion with confluent papules.

Urticaria (Welts)
Urticarias are fleeting, slightly elevated, fuzzily limited edematous elevations of the tissue (welts). Wheal is a raised, erythematous and edematous papule or plaque, which represents short-duration vasodilation and vasopermeability.

**Tumor (Swelling)**

A tumor is a large node greater than 5 cm, which develops from an increase of tissue in the dermis or epidermis. Examples are benign and malignant neoformations like the basaliom.

**Vesicula (Vesicle) and Bulla (Blister)**

Vesiculae and bullae are circumscribed cavities filled with free fluid. They only differ from each other in size. The border between vesicula and bulla is a diameter of 5mm.

**Pustula (Whelk)**

A pustule (synonymous: purulent blister) is an accumulation of purulence within the epidermal cavity. Depending on the composition of secretion, one distinguishes between pathogen-containing, infectious, leucocyte-rich, or sterile whelks.

**Telangiectasia**

A telangiectasia is dilated, superficial blood vessel
Secondary Efflorescences

Squama (Flake)

Flaks are larger accumulations of cornifying epithelial cells. On the basis of their size, they can be classified into rough, medium, and fine exfoliative, which are detached from the skin with varying degrees of difficulty. Also, the color is crucial. An example for the clinical picture with flake formation is psoriasis.

Crusta (Crust)

Crustae are appositions of dried up secretion. They can be bloody (hemorrhagic), purulent, serous, or talcous.

Erosio (Erosion), Ulcus (Ulcer) and Exkoratio (Excoriation)

Image: “Ulcers fissures,and erosions” by Madhero88. License: CC BY 3.0

Erosio, ulcus, and exkoratio are different substance defects of the skin. Hereby, erosio is the most superficial form, which only affects the epidermis. Exkoratio reaches deeper and also affects the dermis. An ulcer is the chronic form and reaches at least into the deep dermis and heals very poorly.

Cicatrix (Scar)

A scar (cicatrix) develops from a defective healing of a substance defect of the skin. It contains collagen and is free of hair follicles and perspiratory glands. Besides surgical interventions and other traumas, scares can also form e.g. in the event of healing of acne vulgaris.

Cyst

A skin cyst is a tissue cavity, which contains thin or thick secretion. In contrast to a pseudocyst, it is lined with epithelium (encapsulated).
Lichenification
Thickening of the skin, characterized by accentuated skin-fold markings.

Atrophy
Acquired loss of substance that may appear as a depression with intact epidermis or as sites of shiny, delicate, wrinkled lesions.

Narrowing It Down – Further Steps
While the classification of the correct efflorescence forms the base for correct description of the findings, there are several further characteristics, which should be considered. They include color, shape, localization and number, limitation, surface, and consistency.

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