

# Examination of the child's skin and skin adnexa

## Skin

 For more information see *Skin* .

(lat. **cutis**, greek. **derma**)

It is one of the smaller organs of human bodies. It has mass approximately 7% body weight.

Between her functions include:

- **Function protective** ( barrier ) of her acidic pH 4.5-6 slows down multiplication of microorganisms (mainly yeast and mold). In addition, it prevents injury and penetration of microorganisms into the body.
- **Thermoregulatory** : Uses evaporation (sweating), radiation and convection (conduction) to relieve body excess heat. In the cold environment, it is running out to slow down these physical events (reduction of circulation and prevention of heat loss).
- **Immune** : Immune function in the skin fulfills especially Langerhans's cells which they have ability of phagocytosis and presentation of antigen.
- **Excretory-resorptive** : To function, skin belongs and produces sweat and sebum. Possible excretory properties are used especially in local application medicines.
- **Perceptual** : Located in the skin are nervous endings and many kinds of receptors.<sup>[1]</sup>

## Investigation skin

### Anamnesis

Contains the same requisites like any other anamnesis (NO, RA, PSA, OA, FA, Abuse, GA, ...), in addition we put regard to skin diseases. We ask about course, changes in time and intensity. We are trying to find evocative the cause, possibly periodicity.

### Physical examination

#### Color skin

*Some colorful changes and their causes*

Deviations	Causes
decrease or loss of pigment	albinism, vitiligo, conditions after inflammations of skin (hypo/ hyperpigmentation)
cyanosis	presence more than 50 g/l of reduced hemoglobin
icterus	rise serum levels of bilirubin
nevi	" Mongolian spot " gray-blue, naevus flammeus, hemangioma, pigmented nevus
stains colors white coffee (café-au-lait)	neurofibromatosis, McCune-Albright syndrome
haematomas, petechiae	disorders of hemocoagulation, thrombocytopenia, vasculitis

#### Cutaneous efflorescence primary

*basic perhaps efflorescence*

Type efflorescence	Characteristics
macula	petty bearing (below 1 cm) in level skin, in whose range is leather colorfully changed to <i>Spots they are efflorescence exceeding 1 cm</i>
papule	petty palpable bearing (below 1 cm) projecting above level skin surface <b>Nodules</b> are formations over 1 cm
plaque	elevated flat lesion (over 1 cm), whose the surface is larger than elevation, arises direct or merging papule
vesicle	small formation (below 1 cm) formed cavity with contents fluid <b>Bula</b> is a formation the same character, but exceeding 1 cm
pustule	unit similar vesicles, but with purulent content
cyst	bounded thin-walled unit localized deeper in the skin with liquid or semi-liquid content and covered normal epidermis

#### Cutaneous efflorescence secondary

- excoriation,

- ulceration ,
- peeling,
- crusts,
- fissures ,
- scars. <sup>[1]</sup>

## Hair and nails (skin adnexa)

State the skin under the armpit is also important diagnostic by the flag which can at not thorough examination remain hidden. It often does manifests psoriasis or systemic lupus. By the hair we evaluate speed growth, brittleness, fraying ends and alopecia. These pathology more often occur in autoimmune diseases. On the nails you are we notice nail disc, surrounding skin and condition himself nail \_ e.g. \_ dimples in psoriasis, changes thickness at various fungal affections.<sup>[1]</sup>

## Maternity signs of newborns

Maternal signs newborns you can divided into 3 groups :

- pigmented (congenital melanocytic Nevus, Mongolian stain);
- vascular (hemangioma, naevus flammeus, naevus simplex);
- incurred on basis abnormal development.

Some maternal signs require attention for possible malignant potential, with some it is necessary investigate further possible associated defects.

### Congenital melanocytic nevus

Congenital melanocytic nevus (naevus giganteus, nevus swimsuit) probably arise as a result disturbed migration precursors melanocytes in neural bar. Yours essentially they are these nevi hamartomas. They occur in up to 2% of newborns, in exceptional cases and in form the so- called huge ones congenital melanocytic nevus. They tend to brown whose black color, they can be flat or prominent and frequent they are present terminal hair. They are potentially malignant - the risk of malignancy increases with size and number nevus. Dermatological monitoring is suitable for pigmented ones nevus bigger ones than 0.5 cm. With growth of the child they can nevi to change its appearance - at change colors whose shape is suitable examination for exclusion melanoma. Prophylactic removal lesion does not guarantee protection before development melanoma, therefore it is dermatological tracking appropriate and after removal congenital melanocytic nevus. Congenital nevi they can be associated with a number of others disorders, such as \_\_ neurofibromatosis or leptomeningeal proliferation melanocytes leading to hydrocephalus and others CNS defects (neurocutaneous melanosis ).<sup>[2][3]</sup>

### Mongolian stain

Mongolian spot ( dermal melanosis ) is blue-grey hyperpigmentation most often in the lower ones parties stern whose on buttocks, which you can easily confused with hematoma. It is benign affection. It occurs more often in children Asian and Hispanic origin and black people. It has smooth surface and comparatively clearly boundary. Histologically can be in the pars reticularis coria demonstrate fusiform melanocytes oriented parallel to the skin by the surface, the epidermis is normal, they can be present and melanophages. With growing by age fading occurs, namely most often under 2 years of age. Therapy it isn't necessary. To the malignant changes does not occur.<sup>[3][2]</sup>

### Hemangioma

Hemangiomas can develop whenever during the first ones months of life. They are present in 10% of children in one a year age. Children's hemangiomas they have tendency to disappear - 50% will disappear up to 5 years of age, 90% up to 10 years of age. In place hemangioma can then arise atrophy, telangiectasia, hypopigmentation whose scar. Multiple cutaneous hemangiomas they can be accompanied hemangiomas liver and digestive tract with risk obstruction whose bleeding. Rare they lead extensive and numerous hemangiomas to cardiac failure on basis a big one cardiac issues.<sup>[2]</sup>

### Naevus flaming

Nevus flammeus (port-wine stain) is flat dark red until purple vascular lesion present already at birth. It is relatively rare - occurs in 0.3 % of newborns, his the basis is dilation vessel in corium. Unlike hematomas usually it does not disappear, on the contrary can still darken. It doesn't require treatment. In the first a year of life is possible therapy laser to lighten lesions. At occurrence in area 1. branches trigeminal nerve - nerve ophthalmicus (V1) is suitable ocular examination for exclusion glaucoma , which can occur independently or within Sturge-Weber syndrome ( defined triad glaucoma , epilepsy , naevus flammeus and tends to associated with the present angiomas brain and meninges ).<sup>[2]</sup>

### Naevus simple

Naevus simplex (stork bites, angel's kisses, salmon patches) is salmon- like colored lesion caused by telangiectasias. It occurs in 33% of newborns. He lives in the area eye, hair parts head, neck and compression fades. It occurs frequently bilaterally or symmetrically, on difference from naevus flammeus. It is benign lesions. 40% of these nevus disappears during newborn period, most disappear within 18 months of age.<sup>[2]</sup>

## Links

### Related articles

- Infectious exanthema disease in childhood age

### External links

- Skin disease in newborns ([https://www.johnsonsbaby.cz/files/2\\_dil.pdf](https://www.johnsonsbaby.cz/files/2_dil.pdf))

### Reference

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3. SALAVEC, M – ČELAKOVSKÁ, J – ŠIMKOVÁ, M. DYSPLASTIC NEVUS, DYSPLASTIC NEVUS SYNDROME AND OTHER MELANOCYTIC PIGMENT NEVUS. *Dermatology for practice* [online]. 2008, y. -, vol. -, p. 137-138, Available from <<http://www.dermatologiepropraxi.cz/pdfs/der/2008/03/06.pdf>>.