



EUROPEAN ACADEMY OF
DERMATOLOGY AND VENEREOLOGY

Information Leaflet for Patients

MOLES DURING CHILDHOOD

The aim of this leaflet

This leaflet is designed to help you understand more about moles during childhood. It will tell you what they are, their follow-up and treatment, and practical advice for skin protection.

MOLES DURING CHILDHOOD

What are moles?

Moles (also known as *naevi*) are a benign, well-defined multiplication of *melanocytes* (cells with the ability to produce *melanin* that protects the skin against ultraviolet [UV] radiation damage).

Which type of moles exist in childhood?

Congenital naevi are defined as moles present at birth or developing within the first weeks or months after birth. They are currently classified according to size as follows: a) small (size: <1.5 cm), b) medium (size: from 1.5 to 19.9 cm), and c) large/giant (size: >20 cm). They can be flat or elevated and palpable, with colour varying from light to dark brown or black, and may have a hairy component overlying the surface of the mole (Figure 1).

Additional types of moles which can be found in childhood include:

a) *naevus spilus*, which appears as a brown *macule* (or flat patch of skin), containing small, dark brown spots (Figure 2)

b) *blue naevus*, typically characterized by a uniform blue colour and commonly located on the face, scalp, or back of the hand or feet (Figure 3)

c) *spitz naevus*, which is pink-red to brown in colour, and usually develops on the face and extremities with rapid growth (usually within 2 months; Figure 4).



Fig. 1



Fig. 2



Fig. 3

Fig. 3

Does melanoma frequently develop in moles of childhood?

The risk of developing a melanoma from a pre-existing *congenital naevus* is high for a large/giant *congenital naevus* (3.5-10%), while it is low for a small one (0-4%). Melanoma occurs as a palpable nodule that develops within the mole.

Moles that are located on the palms, soles, or on pressure sites (e.g. waist) do not have a higher risk of transformation into a melanoma compared to moles located on other sites. You should always consider the appearance of the mole rather than the location and, in the case of a suspicious lesion, see a dermatologist.

Is mole screening worthwhile in childhood?

Regular screening is not needed in infancy and adolescence unless required by the general practitioner/clinician, paediatrician, or dermatologist.

Children with large/giant *congenital naevi* should be monitored over their lifetime, starting at birth. Patients with rapidly-

growing moles should be examined by a dermatologist. Also, children who have a family history of melanoma and/or several moles (>100) should undergo mole screening starting at the age of 12-14 years old.

Who should perform mole screening?

Dermatologists, paediatricians, and general practitioners/clinicians with adequate training and expertise in *dermatoscopy* should perform mole screening (a non-invasive way to examine skin).

What are the follow-up schedule and treatment approaches of moles during childhood?

The follow-up and treatment of moles during childhood are similar to those performed in adulthood, and are mainly related to the clinical and *dermatoscopic* characteristics of the moles as well as the patient's risk factors (type and number of moles, family history of melanoma, and skin type). In the majority of cases, moles during childhood do not need to be closely followed-up or removed.

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Different treatment approaches can be used for large *congenital naevi* such as surgery, *dermabrasion* (surgical removal by abrasion), *curettage* (scraping or cleaning using a curette), and laser. The final decision should be made in the context of a multidisciplinary team (including dermatologists, paediatricians, surgeons, psychologist, etc.) in accordance with the child's parent(s).

What is practical advice for the protection of children's skin in terms of sun exposure?

- Direct sun exposure should be avoided in newborns and toddlers, or strictly limited to the early morning or late afternoon when the sun is less strong.
- Sunburns with blisters must be avoided in childhood since it doubles the risk of developing melanoma later in life.
- Children and adolescents should always use a waterproof sunscreen with a sun protection factor of at least 50 that protects from both UVA and UVB.
- It is highly advised that they stay under the shade and wear a T-shirt, a sun hat, and sunglasses with UV protection.
- Sunscreen should be applied 1/2 hour before sun exposure, and must be reapplied every two hours during sun exposure. ■

