

#### **DIGITAL MONITORING OF MOLES**

## What is a nevus (mole) ?



Nevus (mole) is the benign proliferation of pigment-producing cells called melanocytes in the skin, which can be present at birth or occur later. They can be observed anywhere on the body in black, brown, blue, gray, pink or skin-colored, raised from the skin or at the skin level.

#### What is the significance of nevi?

In general, moles start small in childhood and adolescence and tend to grow and reach a constant size over time. Rarely, they can change and develop into a skin cancer called malignant melanoma.

#### What is malignant melanoma?

Malignant melanoma is a rapidly progressive skin cancer that originates from melanocytes and is life-threatening when the diagnosis is delayed. 30% of melanoma lesions develop over an existing mole.

#### How to follow up nevi?

Due to the increased risk of melanoma all over the world in recent years, digital diagnosis and follow-up systems have been developed. Dermatoscopy is skin surface microscopy, and with this method, the dermatoscopic image of nevi can be examined. Monitoring by digital dermoscopy, both macroscopic and microscopic images can be recorded and typical or atypical changes of nevi in the process can be observed. Changes in lesions are graded in terms of structure, size, and color change. Depending on the degree of atypical changes or the risk the person has, follow-up can be planned at short (3-6 months) or long-term (1 year) intervals. The earlier the nevi are diagnosed in the process of transformation into malignant melanoma, the higher the chance of success in treatment. However, in patients who cannot be diagnosed at this stage, the risk of regional lymph nodes involvement is very high. In the case of regional lymph nodes involvement, the cancer has the opportunity to spread throughout the body and the chance of cure is significantly reduced.

#### Should all nevi be followed ?

Of course no. During clinical and dermatoscopic examination, nevi with a diameter of less than 3 mm with banal features may not be followed. However, nevi with atypical (abnormal) appearance, especially those larger than 6 mm, have a higher risk of malignant melanoma transformation.

### Who can benefit from digital dermatoscopic follow-up ?

First of all, people with atypical nevi or nevi that are noticed during routine dermatological examination should be followed up. Additionally;

- I. People with fair skin color, colored eyes, yellow-red hair or freckles,
- 2. People who have sunburned or who have been heavily exposed to prolonged/intermittent sunlight,
- 3. People with multiple (>50) moles on their body,
- 4. People with congenital large moles,
- 5. People who have been diagnosed with melanoma before,
- 6. People with a family history of melanoma,

7. People who have a disease that affects the immune system or who use immunosupressive drugs can be followed.



# What are the advantages of digital dermatoscopic examination and follow-up ?

Digital dermatoscopic examination allows easy identification of benign nevi and thus avoids unnecessary interventional procedures. In addition, while the chance of diagnosis of atypical nevi and early stage malignant melanoma is 60% with the naked eye, this chance is 90% or more with digital dermatoscopy. Digital dermatoscopy has a high efficiency in the diagnosis and differentiation of skin cancers such as basal cell carcinoma and squamous cell carcinoma, which are quite common other than melanoma.

## What are the indications and contraindications of digital dermatoscopic examination ?

It is indicated for any squamous and pigmented lesion that does not contain any definite signs of melanoma. Digital dermatoscopic follow-up is very important, especially for people with multiple nevi. Digital follow-up is not recommended for lesions that swell and form a mass on the skin, these lesions should be evaluated histopathologically in the initial evaluation. Since digital dermatoscopy is not an invasive procedure, it does not pose a risk for the patient, and it can be safely applied at any age.

