Benign Nevi

What are benign nevi?

A nevus, (pronounced nee-vus) is a pigmented area of skin commonly called a mole. Nevi (nee-vye) is the plural form for one or more. Because nevi can have specific precancerous characteristics, the healthcare professional may request for the patient's moles to be examined by a pathologist using microscopic analysis. The diagnosis of benign nevi means the patient's moles are simply pigmented skin growths that show no current signs of abnormality, or pathology, typical of skin cancer.

How moles occur

On average, most adults can have 10–40 moles on their entire skin surface. Moles that are present at birth are called congenital nevi, which can continue to grow, or change in size and color as we age. Other moles that develop later in life, typically in early adulthood, arise from exposure to sunlight and are called acquired nevi. However, the number, shape, and size of moles are determined by both genetics and exposure to sunlight.

No two moles are alike

Each mole is unique and has its

own characteristics in terms of color, shape, size, and pattern of growth or change. A mole may first appear as a small, flat, light-colored area that may then darken and become more raised, or dome-shaped depending on family history and amount of exposure to sunlight.

The typically tan to brown color of moles is due to their being made up of melanocytes, the cells that produce the pigment melanin. When exposed to sunlight, the melanin in our skin cells reacts to cause tanning, which is our body's way of protecting the skin. However, too much ultraviolet light in these pigmented areas can trigger cell changes that lead to skin cancer.

Health risk of moles

Some families are known for having many moles on their skin. This is most common in people who are lightskinned and fair-haired with light-colored eyes.

These individuals are at higher risk for skin cancer, particularly if they have frequent exposure to sunlight and a family history of skin cancer. Exposure to UVA/ UVB rays of tanning beds also increases risk. Darkerskinned people may have fewer moles, but they are also at risk for skin cancer. Most moles can easily be removed in a dermatologist's office.



Benign nevi are pigmented areas of skin moles that show no current signs of abnormality of pathology typical of skin cancer.

How are benign nevi diagnosed at the lab?

Tissue from a biopsy is sent to a pathology lab. There the tissue is prepared on glass slides and reviewed by a pathologist, a clinician who has specialized in the diagnosis of disease. At Inform Diagnostics,

> all of the pathologists have further specialized in their specific field of practice, such as dermatopathology for dermatology conditions.

The pathologist looks for abnormal cellular changes

under a microscope. He or she interprets the findings under the microscope in the context of the clinical information provided by the healthcare provider. Some cases require additional special analysis to evaluate proteins, RNA and/or DNA.

At Inform Diagnostics, difficult and unusual cases are reviewed together by our specialists at large multiheaded microscopes to render the most accurate and definitive diagnosis possible.

The pathologist creates a pathology report with all the important findings, including critical information to help guide treatment and assess prognosis, which is sent back to the healthcare provider.



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Monitoring moles with ABCDE technique

Frequent self-examination of skin is important. The ABCDE technique makes it easy to do this at home, and any changes observed in moles should be immediately reported to a dermatologist.

A = Asymmetry

An uneven or **asymmetric** shape (one half does not match the other half)

B = Border

An irregular border (a ragged or ill-defined border)

C = Color

Shades or uneven **color**, of red, brown, tan, blue white, or black

D = Diameter

A **diameter** greater than a pencil eraser (6mm, or 1/4 inch)

E = Evolving

An evolving or changing size, shape or texture

The skin is the largest organ of the body. Because water, sand, and snow are reflectors of the sun's rays, protecting the skin year-round is essential. Follow these and any other clinician-recommended protective strategies year-round:

- Always wear a waterproof sunscreen labeled for both UVB and UVA, applied 15 minutes before going outdoors
- **2**. Shade the face with a hat, and wear sunglasses to protect the eyes
- **3.** Minimize outdoor exposure between 10:00 a.m. and 4:00 p.m.
- Wear protective clothing to keep the sun off sensitive areas—shirts with long sleeves, gloves, and trousers

Learn more!

www.webmd.com/skin-problems-and-treatments/ screening-moles-cancer

www.cancer.gov/cancertopics/factsheet/Risk/moles

www.nlm.nih.gov/medlineplus/moles.html

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