Frequently Asked Questions about Moles

WHAT ARE MOLES?
Moles are benign skin tumors composed of nevus cells, which are derived from melanocytes. These skin cells produce melanin, the pigment that gives skin its color.

Most adults have between 12 and 20 nevi. The medical terms for these are melanocytic nevi, pigmented nevi, and common moles. There are many types, classified by the location and arrangement of the nevus cells.

HOW ARE THEY CAUSED?
Some melanocytic nevi, termed "congenital nevi," are present at birth or appear during infancy. New melanocytic nevi appear in childhood and into early adulthood. Sun exposure appears to stimulate the growth of nevi and most new nevi appear on sun-exposed skin. Fewer nevi are acquired after the age of thirty. In later adulthood, nevi become lighter in color and may completely disappear. Pregnancy may cause nevi to increase in size and become more heavily pigmented.

ARE MOLES DANGEROUS?
Some moles differ in appearance from common melanocytic nevi. These atypical (dysplastic) nevi are usually larger, ranging from 6-15 mm. The borders are irregular and indistinct. Color is variegated, with a mixture of pink, brown, tan, and black. The surface is often irregular, commonly with a raised center and flat border “fried egg” appearance. Lesions which have changed; cause symptoms; have areas of gray, pink, or white color; or are asymmetrical in both vertical and horizontal axes should be evaluated. Atypical nevi can arise from common (melanocytic) nevi, or be atypical from the onset. New atypical nevi continue to appear well into adulthood, unlike common nevi. The presence of atypical nevi increases melanoma risk 3-20 fold over that of the general population. Of all melanomas, 10-20% arise within atypical nevi.

Persons with atypical nevi should have routine skin examinations beginning at puberty. Some may need referral to a dermatologist.

RISK FACTORS
You are at increased risk for developing melanoma (the most serious form of skin cancer) if you:

- have fair skin, red or blonde hair, and/or blue or green eyes,
- have had excessive sun exposure in the first 10 to 18 years of life,
- have a history of blistering sunburns in childhood or adolescence (risk increases with number of episodes),
- have certain medical conditions, e.g. immunosuppression.

PREVENTION
You can decrease your risk by:

- Routine use of sunscreens with a sun protection factor of 15 or higher.
- Avoiding tanning beds. The World Health Organization has declared tanning beds a human carcinogen.
- Self examination using the A-B-C-D-E-S Guide adapted from the American Academy of Dermatology.
- You should consult your physician promptly if you notice any of the following:
  - Asymmetry – irregular shape where one half is a different shape than the other.
  - Border – irregular notched, scalloped, or vaguely defined borders.
  - Color – nevi that have many colors or an uneven distribution of color, especially dark colors.
  - Diameter – nevi that are larger than 6mm (about the size of a pencil eraser).
  - Elevation – nevi which are above the level of the skin.
  - Symptoms – new lesions, itching, bleeding, tenderness, change in size, color or borders
- Routine physical examinations by a provider if you are high risk, especially if you have moles in areas difficult to observe:
  - scalp
  - mucous membranes (mouth, nose, vagina, anus)
  - perigenital area
TREATMENT

If, after examination, your provider determines further evaluation is necessary, he/she may recommend a biopsy. A biopsy is the removal of tissue for microscopic examination. There are three methods for obtaining the skin sample.

- **Shave biopsy**: a local anesthetic is injected and the elevated part of the suspect skin area is removed with a scalpel.
- **Punch biopsy**: a local anesthetic is injected and a small cylinder of skin is removed. The skin around the biopsy site is pulled tight and a punch (hollow instrument) is firmly introduced into the skin and rotated to obtain the sample. If the sample is large, the area may be closed with sutures.
- **Excision biopsy**: a local anesthetic is injected. The suspicious area is then removed going as deep as necessary to get the entire area. The incision is then closed with sutures. The length of the incision is approximately 3 times the diameter of the mole.

The results of your biopsy are usually available in a week to ten days. Sometimes further surgery is necessary, depending upon the type of biopsy performed and pathology report/findings.

References


If you are a registered University of Illinois student and you have questions or concerns, or need to make an appointment, please call: **Dial-A-Nurse at 333-2700**

If you are concerned about any difference in your treatment plan and the information in this handout, you are advised to contact your health care provider.

Visit the McKinley Health Center Web site at: [http://www.mckinley.illinois.edu](http://www.mckinley.illinois.edu)