

Moles

The medical term for a mole is a NEVUS (mole is Latin for “spot.”). Nevi is the plural of nevus. Congenital nevi are moles present at birth; acquired nevi develop anytime later. Nevi are made up of a particular type of cell, and the name is used to distinguish them from other, similar appearing fleshy growths.

Acquired Nevi

Most moles that are acquired during life are usually less than 1/4 inch in size. Many of those that form in childhood and early adult life are now thought to be due to sun damage. Most people think of a mole as being a dark brown spot, but moles have a much wider range of appearance. They can be raised from the skin and very noticeable, or they may contain dark hairs. Having hairs in a mole doesn't make it more dangerous. Moles can appear anywhere on the skin, alone or grouped. They usually are brown in color and can be various sizes and shapes. Special cells that contain the pigment melanin cause the brown color.

Facial moles are probably determined before a person is born. Some may not appear until later in life, but moles that appear after age 50 should be regarded with suspicion. Moles may darken, which can happen after exposure to the sun, pregnancy and sometimes during therapy with certain steroid drugs. There is little risk of melanoma cancer developing in these moles.

Atypical moles (dysplastic nevi or Clarks nevi)

An estimated one out of every 10 Americans has at least one atypical mole. These moles are larger than common moles, with borders that are irregular and poorly defined. Atypical moles also vary in color, ranging from tan to dark brown shades on a pink background. They have irregular borders that may include notches. They may fade into surrounding skin and include a flat portion level with the skin. These are some of the features that one sees when looking at a melanoma. When a pathologist looks at an atypical mole under the microscope, it has features that are in-between a normal mole and a melanoma.

While atypical moles are considered to be pre-cancerous (more likely to turn into melanoma than regular moles), not everyone who has atypical moles gets melanoma. In fact, most moles -- both ordinary and atypical ones -- never become cancerous. Thus the removal of all atypical nevi is unnecessary. In fact, half of the melanomas found on people with atypical moles arise from normal skin and not an atypical mole.

Congenital nevi

Only a few babies, about 1 in 100, are born with a mole, the congenital nevus. These can vary in size from being less than 1/4 inch to covering almost the entire body. Large nevi can vary greatly in size, shape, color, surface texture, and hairiness. Some are reddish-tan; others are almost black. Most are shades of brown. Some have fine downy hair; many have long, thick, darker hair. Some have a permanent “goose bump” appearance.

Nevi measuring 4 inches (10 cm) or more at birth occur in about one in every 20,000 children. Giant congenital nevi involving much of the body surface are less common, possibly around one in every 200,000 to 500,000 births. Many people with a giant nevus will have anywhere from several to hundreds of smaller “satellite” nevi. In a very few persons with giant moles, nevus cells can also be found in the spinal cord and near the brain, a condition called neurocutaneous melanosis.

The exact risk of melanoma developing in a giant congenital nevus is not known but is thought to be at least 6%. There has not been any melanoma in the satellite nevi, and those on the arms and legs are also less dangerous in general. Small and medium sized congenital nevi have a much lower risk, perhaps 1/10%. Small congenital nevi rarely turn malignant before puberty. Congenital moles will grow in proportion to body growth. Their color may stay the same, lighten slowly, or darken slowly over time. Changes in growth, in color, in surface texture, pain, bleeding, or itching are all of concern. Any such changes should be evaluated medically if they last longer than a few weeks.

Treatment

Surgical excision should be done where cancer is a reasonable concern. Improving cosmetic appearance is another reason for excision, but all surgery leaves some scarring. Smaller nevi can be "shaved off". Larger ones can be cut out directly and the wound edges sewn together. Much larger nevi may be excised in stages by taking a little more out each time until the entire nevus is removed. This is called "serial excision." Cutting out very large nevi will leave behind a raw area that is too big to be sewn together and must be covered. This can be done with a split thickness skin graft from some other normal area of the body. The skin-grafted area will have varying degrees of scarring and will usually be thinner and more fragile than normal skin.

There have been several reported cases of melanoma developing underneath a skin graft from nevus cells left behind. Occasionally, thickened scars called keloids may appear. Laser treatment, chemical peels and dermabrasion, also destroy nevus cells before they can be checked for cancer under a microscope. They also leave nevus cells behind and the pigment often seems to reappear.