

Health

## Melanoma Is More Than One Disease

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WEDNESDAY, Nov. 16 (HealthDay News) -- As with other cancers, scientists are learning that not all melanoma skin cancers are genetically alike. And that may have far-reaching implications for the treatment and prevention of melanoma.

A new study reports that, depending on the area of the body affected by melanoma, there are at least several distinct types of the disease: Those arising from chronically sun-damaged skin and those on skin without sun damage; those that occur on areas rarely exposed to sun, such as the palms and soles of feet; and melanomas that occur on mucous membranes.

"Up to now melanoma was regarded as one disease and was treated as such. But our study shows there are marked genetic differences in melanoma cases. These are distinct diseases," said study author Dr. Boris Bastian, an assistant professor of dermatology and pathology at the University of California, San Francisco.

Results of the study appear in the Nov. 17 issue of the *New England Journal of Medicine*.

Nearly 60,000 Americans will be diagnosed with melanoma this year, according to the American Cancer Society. Almost 8,000 will die from the disease, reports the ACS. Half of these malignancies will be diagnosed in people younger than 60.

If caught early, melanoma can be cured with surgical removal. If the disease has spread, the prognosis is rarely good.

"Melanoma is an awful disease if it can't be surgically cured," said Dr. Paul Meltzer, head of the section of molecular genetics in the cancer genetics branch at the National Human Genome Research Institute, in Bethesda, Md.

Bastian and his colleagues compared 126 different melanomas from four groups that all received differing levels of ultra-violet (UV) light exposure from the sun. Thirty melanomas were from skin that showed signs of chronic sun damage, while 40 were from skin that didn't show signs of sun-induced damage. Another 36 melanomas were from areas that are rarely exposed to sun, such as the palms and soles of the feet. The remaining 20 melanomas occurred on mucous membranes, such as those found in the mouth, nose and genital areas.

When they compared these melanomas from different areas of the body, the researchers found significant genetic differences that often correlated with the location of the melanoma.

"The bottom line is that there are distinct sets of melanoma," said Bastian.

Meltzer, who wrote an accompanying editorial in the same issue of the journal, said this study "may have significant clinical implications in the long run," and is "laying the groundwork for a better individualized and personalized cancer therapy."

"I'm somewhat optimistic now that we may turn the corner on melanoma therapy," he added.

Both Bastian and Meltzer said one of the reasons current melanoma therapies might not be as effective as doctors would like them to be is that they may not be targeting the right type of melanoma.

"These findings may be very important for designing targeted therapies for these various types," said Bastian.

While researchers continue looking for better ways to treat melanoma, and possibly prevent it, Bastian said there are steps everyone can take to help protect their skin. Most important, he said, is to try to stay out of the sun between 10 a.m. and 4 p.m. If individuals have to be out, he said, they should wear clothing that protects the skin, including a hat. Sit or stand in the shade wherever possible.

Sunscreen, he said, should be considered as a third line of defense and using it doesn't mean it's OK to be out in the sun all day, every day. Sunscreen should protect against both UVA and UVB light and he recommended using it "generously and frequently" during sun exposure. Additionally, he said, it's very important for parents to protect young children from the sun because some of the genetic alterations that occur in melanoma may begin to develop when people are young.