

GeneScene

VOLUME 2, ISSUE 2

SUMMER 2007

The official newsletter of the Guilford Genomic Medicine Initiative (GGMI)

Hereditary Melanoma: taking extra precautions

Did you know...

- The National Cancer Institute estimates that there will be nearly 60,000 new cases of melanoma this year and over 8,000 deaths from the disease.
 - About 800 of those melanoma-related deaths will be from hereditary melanoma.
 - Famous people who have had skin cancer include:
Bill Clinton
Laura Bush
Farrah Fawcett
Elizabeth Taylor
Bob Marley*
- * This best-selling reggae artist died of melanoma and brain cancer at the age of 36 years.



Summer is here! Time to inflate the beach balls and buy a new bathing suit. While we all have heard about the importance of protecting our skin from the sun, there are some of us that need to take extra safety measures.

Unlike other kinds of skin cancer, melanoma can quickly spread throughout the body and cause death if not found and removed early.

About 10 percent of people who develop melanoma, the deadliest of all skin cancers, have a higher chance to get the disease than the average person. People with this high chance are said to have **hereditary melanoma**.

Hereditary melanoma can run in families and is caused by a change in a gene that normally tells our skin cells to stop growing. Having this gene change does not guarantee skin cancer will occur, but the skin is more affected by other risk factors, such as ultraviolet radiation (UV rays) from the sun or tanning beds.

One of the genes that causes up to 40 percent of hereditary melanoma cases has been found and is called the *p16* gene. A person with this gene change has a 50 percent chance to develop melanoma by the age of 50 years, and a 76 percent chance to develop melanoma by the age of 80 years. Some people who have a change in their *p16* gene are also more likely to develop cancer of the pancreas.

Although a test for the *p16* gene change is available, most people (90 percent) who develop melanoma do not need genetic testing. Because of the costs and other limitations of genetic testing, genetic specialists recommend that only people who meet certain guidelines should be offered the

continued on next page



**Guilford
Genomic Medicine
Initiative**

www.genomic-medicine.org

Hereditary Melanoma: taking extra precautions (cont.)

option of genetic testing. A person may want to think about genetic testing for hereditary melanoma if they have at least one of the following:

- ✓ Had melanoma at least twice, where the second cancer was not caused by the first melanoma (i.e. two primary melanomas)
- ✓ Had a family member with two or more primary melanomas
- ✓ Had a family member who had melanoma AND pancreatic cancer
- ✓ Have a family member who is known to have a change in their *p16* gene that increases the chance to develop melanoma.

Testing for hereditary melanoma is not always needed, since it does not change how we screen for skin cancer. Anyone who has a lot of moles on their skin should examine their whole body with a hand mirror. They should also receive skin exams from their doctor every 6-12 months. You may want to know if you have hereditary melanoma because you may be more likely to:

- ✓ limit your exposure to the sun or tanning bed
- ✓ get skin exams
- ✓ allow your doctor to test suspicious moles.

Knowing if you have the *p16* gene change may also help you get insurance coverage for “mole

mapping.” Mole mapping is a procedure where your doctor will take pictures of different moles on your skin.

At the next visit your doctor can compare the pictures from this visit with the pictures taken at your last visit. These before and after photos help your doctor decide if your moles have are larger and/or have changed shape or color.



Whether you have a hereditary melanoma or not, here are some tips to help limit your chance of developing skin cancer:

- ✓ Limit UV ray exposure by staying out of the sun from 11am-3pm
- ✓ Wear long sleeves and pants and a wide-brimmed hat while outside
- ✓ Avoid tanning beds
- ✓ Use sunscreen with an SPF of 15 or greater, especially with young children
- ✓ Perform regular, full-body self-exams
- ✓ Have your doctor perform full-body skin exams and/or point out moles that have become suspicious

With the right precautions, everyone can have a safe and enjoyable summer!



On the Web...

Guilford Genomic Medicine Initiative
www.genomic-medicine.org

National Cancer Institute
www.cancer.gov

Understanding Hereditary Melanoma
www.myriadtests.com/melanoma.htm