



# ASK DR. DEBBIE...

By Debra A. Hill, MD

## FUN IN THE SUN AND HOW TO KEEP IT THAT WAY WITH THE SLIP, SLOP, SLAP METHOD OF THE AUSSIE'S:

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I recently received a catalogue in the mail called *Coolibar*, and being a catalogue junkie since the good old days of the *Sears Catalogue* when I was a kid I, of course, had to page through it to see what fun things there'd be inside to circle and daydream about. Interestingly, it was full of sunprotective clothing with various UV ratings. The first page of the catalogue talked about the products being inspired by the Australians who have launched a campaign over the last two decades to decrease skin cancers. I found this rather interesting, and decided to do a little more research on this.

I discovered that the reason for this is that Australia has the highest skin cancer rate in the world, and that one out of every two Australians develops a non-melanoma skin cancer in the course of their lifetime. Some of the reasons for this have to do with the fact that Australia's location on the planet is such that it is closest to the sun in the summertime—meaning more intense exposure to damaging Ultraviolet light

of the sun. UV levels vary from country to country and also depend on geography. For every increase in altitude of about 1300 feet, the UV radiation goes up by about 3%. And, UV light is reflected from snow, clouds, water, and light colored sand—increasing one's exposure not only

tanning salons that indicate greater safety if one tans in one of their tanning beds. NOT SO! Years ago tanning beds used UVB, but as it tended to cause burning, they switched to tanning beds that emit primarily UVA light. What they don't tell you is that although UVA rays are less likely to burn you, they

can cause malignant melanoma and possibly immune system damage.

SKIN CANCER IS THE MOST COMMON FORM OF CANCER IN THE UNITED STATES.

when out on the water, but also during winter when skiing, and even on cloudy days. People often think that because it is a cloudy day that they are less exposed to damaging UV light and tend to expose themselves for longer periods of time. Also, sunscreen gives people the idea that they can stay out longer in the sun, again compounding the problem of sun exposure.

UV light consists of two wavelengths of light: UVB, or short wave ultraviolet light, and UVA, or long wave ultraviolet light. UVB is what can burn the outer layer of the skin. UVA penetrates more deeply and weakens the skin's connective tissue. Many people are lured into the false advertising of

Now there has been some recent research that indicates that heavy sun exposure actually prevents some kinds of cancer, in particular certain white blood cell cancers, and has been associated with better survivability for those with malignant melanoma. This does not mean that you should go out and throw all caution to the wind and get all the sun exposure you can. It is well established that repeated sunburns before the age of 18 and heavy sun exposure over long periods of time does correlate with increased risk of skin cancers. What is thought about the results of the study is that the increased vitamin D from the sun exposure is most likely what was somewhat protective against the white blood cell cancers.

More research is being done at this time to ferret this out.

**Skin cancer is the most common form of cancer in the United States.**

There are **three kinds of skin cancers: Basal Cell Carcinoma, Squamous Cell Carcinoma, and Malignant Melanoma.** Basal cell accounts for about 80% of all skin cancers, squamous cell for about 15%, and the rest is accounted for by malignant melanoma. Basal cell and squamous cell skin cancers are slow-growing cancers that are quite treatable and generally not deadly, but do require immediate treatment to avoid spreading which could result in disfiguring surgery.

Based on my own recent personal experience if your doctor recommends shaving off a suspicious lesion on your skin, ask them to draw a circle around the lesion with a pen and then to take a photo of the lesion before they do the shave biopsy. Make sure that they take the photo in such a way that it includes other landmarks on your body, i.e. not so close up that you couldn't tell where on the body the skin photo was taken.

This past December I noticed an area that looked unusually pearly and shiny under my left eye. Having seen basal cell carcinomas during my medical school training, I was concerned and called my dermatologist right away. She was on vacation, so I asked to be seen by the covering doctor. He agreed that it looked suspicious, and suggested a shave biopsy. He said to call the office in a week for the pathology results. Well, my doctor returned from vacation and called me to let me know that the shave biopsy turned out to be basal carcinoma. She wanted me to come in right away to examine the spot. I came in and she circled the area where the biopsy had been done. It was only about 2 millimeters in diameter, and was a bit difficult to see as it had healed quite well already.

But she did circle it and took a photo. I was scheduled for Moh's surgery, a special surgery that involves repeated shaves of the affected area until all of the margins of skin are clear of any cancer cells. The procedure can take several hours, but is done in the office under local anesthesia. I foolishly delayed the surgery by one week as I had some travel plans that I didn't want to change. Big mistake on my part, as when I returned, the surgeon, even with the photo didn't feel confident that she could find the site where the original biopsy was taken from because it had healed so well. That didn't mean though, that there weren't remaining cancer cells that weren't visible to the eye. It was possible though, that the

**WEAR SUNSCREEN THAT HAS AT LEAST A SUN PROTECTIVE FACTOR (SPF) OF 30 OR MORE. IT MUST BE APPLIED AT LEAST 20 MINUTES BEFORE GOING OUTSIDE IN ORDER TO GIVE IT TIME TO BOND WITH THE SKIN.**

shave biopsy had stimulated the healthy cells around it so that they would have destroyed the remaining cancer cells. There was no way of knowing. So all I can do is watch and wait, and go in each month to be checked for a return of the basal cell lesion. This could turn into a bigger problem if it grows under the surface extensively before showing up at the surface. *I share this with you so that you can avoid making the mistake that I did.* I should have asked the first doctor to circle the lesion and take a photo, actually he should have done that anyway, but I always feel it is a good idea if the patient can advocate for her own best care. And, I should not have delayed the surgery.

Getting back to the kinds of skin cancers: It is important to check your own skin and if you notice a new mole that occurs on your skin after the age of 30, or there are any changes in terms of color, size (greater than 5 mm.), or irregularity of the border of

the mole—definitely get it checked as these may be early warning signs of a possible malignant melanoma which is the deadliest form of skin cancer. It requires immediate surgery and possibly chemotherapy if it has spread to other parts of the body. The most common areas for malignant melanoma to occur are on the upper back, or the legs, or even on the soles of the feet, or underneath the bathing suit area.

Basal cell carcinomas tend to occur on the face, ears, neck, back, arms or legs, especially in fair-skinned people—hence the high incidence in Australia where the inhabitants are mostly of Northern European descent. Basal cell carcinoma looks very different from anything having to do with a change in the appearance of a mole. In fact it can easily be missed as it looks like a smooth or waxy small bump that is whitish or pinkish in color that doesn't go away in a few weeks. At times the center can develop an ulcer or sore as it grows.

Squamous cell carcinoma also has nothing to do with any change in the appearance of a mole, and also can be easily mistaken for dry skin due to sun damage. What to look for is a scaly, crusty or wart-like bump. It can range in size from that of a pea to a chestnut. Squamous cell carcinoma is typically seen on the rim of the ear, face, lips and mouth, neck, back of the hands, legs and back. There is a 95% cure rate with surgical treatment of Basal cell and squamous cell carcinomas.

**The most serious skin cancer is, of course, Malignant Melanoma.** The 6 largest risk factors for developing malignant melanoma according to Darrell S. Rigel, MD, per the journal CA, a cancer journal for doctors, are:

- Family or personal history of malignant melanoma
- Presence of blonde or red hair

--Presence of marked freckling on the upper back  
 --History of three or more blistering sunburns prior to age 20  
 --History of three or more years of an outdoor summer job as a teen-ager  
 --Having unusual looking moles and/or an increase in the number of freckles on the body. Rigel says that people with one or two or these risk factors have more than three times the risk for developing malignant melanoma, compared with the general population. Those with three or more of the factors have a 20-fold increased risk. Interestingly, the **National Cancer Institute warns that from 40 to 50 % of all Americans who live to age 65 will develop at least one skin cancer.**

So with all that in mind, **what can we do to prevent skin cancer?** *I was most impressed with Australia's aggressive*

*sun protective "Slip! Slop! Slap! Program, i.e. Slip on a shirt, Slop on sunscreen, and Slap on a hat before going out in the sun."* Their Sunsmart Program also recommends:

—"Stay in the shade during midday hours from 11:00am to 4:00pm, which is the peak time for UV exposure.  
 --Dress in clothing that covers arms, legs, and neck. In Australia, many garments have UV ratings on the labels, which indicate how well they protect skin.  
 --Put on sunglasses that block out 95%-100% of UV rays. (Note: I'll never forget my 85 year old grandmother telling me the one ailment nearly everyone had in her retirement home was macular degeneration of the eye which causes blindness—and she wished she could warn all young people to wear sunglasses to avoid the

sun damage to the eyes that causes this disorder in later years!)  
 --Wear sunscreen that has at least a sun protective factor (SPF) of 30 or more. It must be applied at least 20 minutes before going outside in order to give it time to bond with the skin."

We all enjoy being out in the sun as a part of our love of diving; I hope this is helpful to you all. I wish you all health and happiness! And remember to **Slip! Slop! And Slap!** your way to healthy fun in the sun!

As always, Happy and Safe Diving!

Yours Truly,

*Debbie Hill Titus, MD*

## PICNIC @ BIG CORONA EVERYONE SEEMED TO LOVE IT!



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