Look beyond the sun for skin cancer culprits, doctors warn

June 21 2013, by Serena Gordon, Healthday Reporter

Tanning beds, organ transplants and smoking among additional risk factors.

(HealthDay)—Think "skin cancer" and blame immediately goes to the sun. Justifiably so—though not totally, skin doctors say.

"Hands down, sun exposure is the biggest risk factor for skin cancer," said Dr. Sherrif Ibrahim, an assistant professor of dermatology at the University of Rochester Medical Center in New York. "And it's a cumulative risk. The more exposure you've gotten, the bigger the risk. The skin doesn't know if you're out one time for an hour or 12 times for 5 minutes at a time. Your skin keeps a running meter."

That's important to know as summer officially begins, according to skin health experts at the American Academy of Dermatology.

Each year, more than 3.5 million basal and squamous cell skin cancers,

known as non-melanoma cancers, are diagnosed in the United States, according to the American Cancer Society. These types of skin cancer aren't as deadly as melanoma, which affects about 75,000 U.S. residents annually. About 9,000 people die from melanomas and 2,000 from non-melanoma skin cancers each year, according to the society.

However, the sun isn't the only thing that can be problematic. Tattoos, certain chemicals, other diseases and possibly even those better-for-the-environment light bulbs all have been linked to skin cancer.

And people who think tanning beds are safer than soaking up the sun should think again, Ibrahim suggested.

"There's an unquestionable link between tanning booths and skin cancer," Ibrahim said. "There's been an enormous surge in the popularity of tanning booths, and with it the average age of people with melanomas is much lower. I had a 22-year-old patient just the other day."

This is because it doesn't matter if the ultraviolet light comes from the sun or from an artificial source. Dr. Alan Fleischer, a dermatology professor at Wake Forest Baptist Medical Center in Winston-Salem, N.C., explained that "the kind of light produced by tanning beds isn't better or worse than natural sunshine, but people may get more and longer exposure, especially in areas where outside, they might display more modesty."

Even getting a manicure can expose you to ultraviolet light.

"Ultraviolet nail treatment units do produce UV light, but the risk is quite small," said Fleischer. The lights are used to help gel or regular polishes set or harden.

Despite the low risk, the American Academy of Dermatology still

recommends putting sunscreen on your hands before you get a manicure.

Even things that seem unrelated to UV light—such as getting an organ transplant or a tattoo, or having an autoimmune disease—have been linked to skin cancer diagnoses.

People who've had an organ transplant have an extremely elevated risk for skin cancer—up to 200 times higher than others, according to Ibrahim.

This stems from the medications that must be taken after a transplant to suppress the immune system. As a result, the immune system, which normally fights off growing cancer cells, may not be strong enough to do its job.

Organ transplant recipients should talk to a dermatologist to get an idea of their baseline risk for skin cancer and find out how often they need to be screened. Ibrahim said that some high-risk people who've had organ transplants need screening every three to four weeks.

Although tattoos aren't known to increase the risk for skin cancer, tattoos can make it harder to detect cancer-related changes in moles. If you're considering a tattoo, make sure there aren't any moles in the area you're thinking about inking, according to experts from the American Academy of Dermatology.

Like people who've had an organ transplant, those with autoimmune diseases often take medications that suppress their immune system. These drugs can also increase their chances of developing skin cancer, Fleischer said.

The experts also pointed out other potential sources of skin cancer risk, including:

- **Compact fluorescent bulbs:** These "eco-friendly" lightbulbs emit ultraviolet light, which normally isn't a problem because of a coating on the bulbs. However, if there's a crack in the coating, UV light can come through. A study in the journal *Photochemistry and Photobiology* showed that these bulbs can emit some UV light, but no one has yet shown a link to skin cancer.
- **Previous radiation:** Areas of skin that have been exposed to radiation, such as that used for treatment of other types of cancer, have an increased risk for skin cancer, according to the American Cancer Society.
- **Parkinson's disease:** A study in the *Archives of Neurology* found an increased risk for melanoma in people with Parkinson's disease. The authors, whose research was published in September 2012, suspect that some of the genes that cause Parkinson's disease may also give rise to skin cancers.
- **Smoking:** Researchers also suspect a link between cigarette smoking and skin cancer. Two studies—one published in June 2012 in the *Archives of Dermatology* and the other in December 2011 in the journal *Cancer Causes and Control*—found that squamous cell cancer was more common in smokers than in nonsmokers.
- **Chemical exposure:** Workplace exposure to certain chemicals can increase the risk of non-melanoma skin cancers, according to the American Cancer Society. These chemicals include arsenic, which is found naturally in well water and is used in the manufacture of some pesticides, as well as tar, coal, paraffin, and some types of oil.
- **Driving:** Fleischer said that in the United States, skin cancers are much more common on the left side of the body because of the time spent driving. In Europe, more cancers occur on the right side. And, though he said he hasn't seen any studies on it, he suspects that people who regularly drive convertibles probably

have higher rates of skin cancer because of increased exposure.

Both Fleischer and Ibrahim recommended wearing sunscreen regularly (applying liberally and reapplying often), avoiding the midday sun, seeking shade, wearing a wide-brimmed hat outside and covering up as much of your body as possible to lessen your sun exposure.

Though other factors can and do increase risk, "there's no question that the sun is the biggest risk factor for all types of skin cancer," Fleischer said.

More information: The American Academy of Dermatology has more about skin cancer.