To prevent skin cancer: Vigilant watch - plus sunscreen

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Sumaira Aasi, MD, director of Mohs and dermatologic surgery at the Stanford Medicine Outpatient Center in Redwood City, said she is seeing increased incidence of melanoma in younger patients such as Kelly Bathgate, who was 32 when diagnosed with the cancer. Credit: Norbert von der Groeben

(Medical Xpress) -- Kelly Bathgate's mother was vigilant. She had three daughters, all fair-haired and fair-skinned, and the family spent several years living in Hawaii and the Philippines. "My mom was always putting sunscreen on us," Bathgate said. "She did everything she could. We were always outside."

Her mother's best intentions, however, were not enough. Even with sunscreen, Bathgate would get sunburned, sometimes weekly. By the time she was 24, she was conscious enough of the freckles she'd

acquired that when her best friend, also fair-skinned, mentioned she'd started going for annual skin exams, Bathgate began to do the same. A few years later, her dermatologist suggested checks every six months.

Bathgate moved to the Bay Area and fell behind on her checkups. Then a friend arrived for a holiday visit. "What's that on your face?" he asked. "That's always been there," Bathgate replied. "Not like that it hasn't," her friend said. It was a spot that her dermatologist had been watching for a couple of years, but in just a few months, it had changed markedly.

Bathgate quickly called a local doctor for an exam, which included the removal of a small portion of the spot. A week later, the call came: the spot on Bathgate's face was melanoma. At first, Bathgate said, "My reaction was fairly nonchalant. My dad had basal cell skin cancer removed several times. He also has a redhead's complexion — and I always suspected that I would deal with the same." But her doctor had different thoughts. "The difference between melanoma and basal cell," she told Bathgate, "is that melanoma is unpredictable in how it spreads — and it spreads really quickly."

That's when Bathgate called Stanford Hospital & Clinics and found Sumaira Aasi, MD, director of Mohs and dermatologic surgery at the Stanford Medicine Outpatient Center in Redwood City.

Aasi was not surprised to see melanoma in someone as young as Bathgate, who was just 32. "We are seeing an increased incidence of skin cancer in adolescents and young adults, especially in people with fair skin who've spent time in the sun," she said. "Kelly was the perfect patient because she pursued treatment, and we caught her melanoma in the earliest phase possible." Using only local anesthetic to numb Bathgate's cheek, Aasi was able to remove Bathgate's melanoma and repair the wound, leaving a barely perceptible scar. When the tissue was examined under the microscope, Aasi was able to confirm that the

margins around the removed melanoma were clear of cancer. Nor had the melanoma gone below the uppermost layers of the skin, making it a very superficial cancer with very low risk of recurrence.

Our skin's function as the primary and first protective barrier against the environment almost guarantees that at some point in a lifetime, it will be damaged. Exposure to the sun is impossible to avoid, and so, it seems, is sunburn. The most recent federal survey showed that half of all American adults have had at least one sunburn in the last year.

According to the Skin Cancer Foundation, skin cancer is the most common form of cancer in the United States. More than 3.5 million skin cancers in over 2 million people are diagnosed annually. One in five Americans will develop some form of skin cancer in the course of a lifetime.

If melanoma is diagnosed and treated early, it is almost always curable, but if it is not, the cancer can spread quickly to other parts of the body, where it becomes difficult to treat and can be fatal. While melanoma represents just 4 percent of all skin cancers, it accounts for about 75 percent of deaths from skin cancer. The American Cancer Society estimates that this year there will 131,810 new cases and 9,180 deaths from melanoma in the United States.

Sun exposure, and particularly the kind that produces sunburn, remains the single most predictive risk factor for development of skin cancer, which may explain why, as Aasi put it, "dermatologists are very passionate about skin cancer because it is one of the few cancers that is preventable."

While people with darker skin can get skin cancer, Aasi said, the risk is higher for people with fair skin. Making changes, she said, doesn't require extreme measures. "We're not asking people to get on a treadmill

or not eat their favorite foods," she said. "We're just recommending that people treat sunscreen like brushing their teeth or using deodorant — don't leave the house without it no matter what the weather is like."

And using sunscreen works: Recently, Australian researchers released the results of a study in which they followed 1,800 patients for over 10 years and found that those who used sunscreen on their faces, ears and tops of hands once daily reduced their rate of melanoma by 50 percent compared with those who used sunscreen on a discretionary basis.

What sunscreen, sunblock, hats, long sleeves and shade do is prevent those cellular changes that trigger cancer's abnormal growth. Aasi and her colleagues are part of the Stanford Pigmented Lesion and Melanoma Program, a large team of clinicians and researchers working to advance the understanding of skin cancer. The team's efforts include research and clinical trials in prevention, early detection and treatment, particularly treatment that combines surgery, chemotherapy and radiation.

Susan Swetter, MD, who directs the program, recently received the 2012 Humanitarian Award from the Melanoma Research Foundation. One of her most recently published papers documented the importance of both self and physician skin examinations for older men, who are more likely to develop and die of melanoma. Last year, the program expanded to include a special skin cancer clinic for transplant recipients whose immunosuppressive medication puts them at higher risk for squamous cell cancers. That clinic will be broadened this fall to provide dermatology care for patients who have been treated for any sort of cancer; treatment side effects include a higher degree of vulnerability to skin cancer.

The Pigmented Lesion and Melanoma Program works with the Stanford Division of Nuclear Medicine and Molecular Imaging, and with

researchers in radiology and engineering, to use the newest imaging techniques for preoperative assessment and lymph node mapping. The group is currently investigating a hand-held gamma camera that uses radioactive tracing to build spatial images.

Stanford's Dermatopathology Services also offer a highly sensitive clinical test that can identify specific genetic changes present in melanoma so that targeted therapy can be specifically designed for individual patients.

Bathgate is still working through what happened.

"It's been interesting to get such a diagnosis and then have it be gone within a month," she said. "But more than anything, I just feel incredibly lucky. It's reminded me of how precious and valuable life is."

She has begun to be more careful with small but important changes. "I'll be wearing SPF 45 or 50 instead of 15 or 25, and I'm definitely putting it on every single time I leave my house — not just on my face, but on all exposed skin. And I've got a spray sunscreen to make sure I reach all the parts that are hard to reach. I'm more conscientious."

She has begun to talk about her skin cancer. "A friend saw the scar on my face a few weeks after the surgery and asked, 'What happened?' I told him, and he said, 'I can't believe you didn't tell me.' I said, 'It's kind of personal and I didn't want to make a big deal of it,' and he said, 'You really need to tell people about this because we're out in the sun and should know that can happen to any one of us.'"

She told another friend who said, "Oh, my husband is a redhead and I don't think he ever gets skin checks. I should tell him to do that." Bathgate said, "Yeah, you should!"

“I think my generation is probably a lot more conscious of all the health risks,” she said, “certainly more than my parents’ generation was, and of course more than their parents’ generation before.

“Still, especially at this age, skin cancer is one of those things that you hear about happening, but don’t think about it happening to you."

Provided by Stanford University Medical Center