Skin lesion leads to more cancer types than once believed

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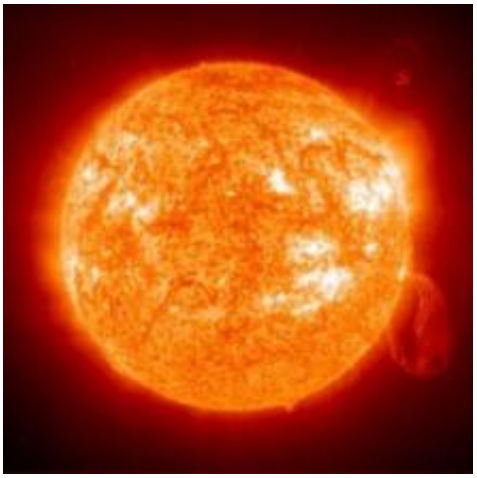

Sun-damaged rough patches on the skin -- actinic keratoses -- can turn into a greater variety of skin cancers than doctors had thought. Credit: NASA

Actinic keratoses are sun-damaged rough patches or lesions on the skin — often pink and scaly — that doctors have long believed can turn into a form of skin cancer known as squamous cell carcinoma.

Now researchers at Brown University, the Veterans Administration Medical Centers in Providence and Oklahoma City, and others have determined that actinic keratoses appear responsible for a larger spectrum of skin cancers than previously thought. Their research is highlighted in the current edition of *Cancer*.

"We found some interesting things," said Dr. Martin Weinstock, the paper's lead author. Weinstock, chief of dermatology at the VA Medical Center in Providence, is professor of dermatology and community health at The Warren Alpert Medical School of Brown University. The U.S. Department of Veterans Affairs Office of Research and Development funded the study.

Vincent Criscione, a fourth-year Alpert Medical School student, served as the paper's first author. Beyond Brown and the VA, researchers from Rhode Island Hospital and Henry Ford Hospital in Detroit also contributed.

To conduct the study, Weinstock and the other researchers looked at 169 patients from the VA Medical Center in Oklahoma City who had a high risk for skin cancers. They, in turn, were among 1,131 patients from multiple cites who took part in a chemotherapy prevention trial conducted previously. Most had at least one actinic keratosis on their body. Combined, they had about 7,784 of the lesions on their faces and ears. There were up to six years of follow-up to quantify the risk of progression of actinic keratoses to cancer.

Among the findings: Two-thirds of the patients who had developed squamous-cell carcinomas, a form of treatable skin cancer, could trace their cancer to actinic keratoses. One-third of patients who ended up with basal cell carcinoma, the most common form of skin cancer in the United States, could trace their cancers to actinic keratoses.

Scientists had previously been able to connect squamous-cell carcinomas to the lesions, but not basal cell. They also found that the actinic keratoses come and go, becoming invisible and resurfacing over time. That was a challenge for doctors because the lesions often were not visible during follow-up.

Thus, the research reinforces the need for skin cancer prevention. Scientists estimate that 40 million people in the United States alone have some form of actinic keratoses, and preventative removal of the lesions costs more than $1 billion annually, Weinstock said.

Before this study, Weinstock said, scientists could rely on one other body of research conducted 20 years ago that found less than 1 in 1,000 instances of actinic keratoses annually turned into squamous cell carcinoma, even though actinic keratoses are commonly removed as a preventative treatment for skin cancer.

Research is underway, Weinstock said, to determine if one of the treatments for actinic keratoses will be effective in preventing skin cancers.

Source: Brown University (news : web)