Study shows link between vitamin D, skin cancer
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A Henry Ford Hospital study has shown a link between Vitamin D levels and basal cell carcinoma, a finding that could lead researchers to better understand the development of the most common form of skin cancer.

In a small study, researchers at Henry Ford and Wayne State University found elevated levels of Vitamin D enzymes and proteins in cancerous tissue taken from 10 patients compared to normal skin tissue taken from them.

Previous studies have linked Vitamin D deficiency with certain cancers but this is believed to be the first time researchers looked at Vitamin D and basal cell carcinoma.

"This finding may help us in future research to determine whether vitamin D plays a causative or reactive role in the development and progression of skin cancer," says Iltefat Hamzavi, M.D., senior staff physician in Henry Ford's Department of Dermatology and the study's lead author.

The study will be presented at the Photomedicine Society's annual meeting in Miami, one day before the American Academy of Dermatology's annual meeting.

Basal cell carcinoma, which affects about 1 million Americans a year, is the most common form of skin cancer. This cancer forms in the basal cells of the deepest layer of the skin. Mohs micrographic surgery is one of the most effective treatments for removing skin cancer.

The 10 patients enrolled in the study were diagnosed with basal cell carcinoma and ranged in age from 43 to 83. All had biopsies taken of cancerous tissue and surrounding normal skin tissue. Researchers found a 10-fold increase in Vitamin D enzyme levels and a two-fold increase in Vitamin D protein levels. The enzymes and proteins help regulate levels of Vitamin D in the skin. Two genes that play a role in DNA and tumor repair also had elevated levels of Vitamin D in cancerous tissue compared to normal tissue.

Provided by Henry Ford Health System