

**Family Medicine Clerkship
Plain Language Summary
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Title: Skin cancer prevention: should we use creams or freezing treatments?

Plain Language Summary:

Skin cancer is a cancer which forms in the tissues of the skin. It occurs due to unhealthy cells which develop changes over time and continue to grow uncontrollably. Skin cancer may occur on all areas of the body, especially those areas that are exposed to sunlight. It can affect anyone, however it is most common in people who have had a lot of UV light exposure and have light skin. There are many types of skin cancers. Skin cancer that occurs in the pigmented cells is called melanoma. Skin cancer that forms on the top layer of flat cells in the skin is called squamous cell cancer. Cells of the bottom layer of skin, called basal cells, can form basal cell cancer.

Actinic keratosis is a patch of skin cells which have begun to change due to the harmful effects of the sun after a long period of time. These cells form a rough patch on the skin that may develop later into squamous skin cancer. These form in areas of the skin that are often exposed to sunlight, such as the face, scalp, and chest. There is a 10% chance that these patches will become cancer, so it is important to treat them before they do so. Scientists have developed ways of stopping the transformation of unhealthy cells into skin cancer. One method is the freezing of this patch of skin with a solution called liquid nitrogen, which kills the harmful cells and stops the spread into cancer. This may involve several repeated freezing treatments over time, and is able to clear the cells that are unhealthy in 32% of individuals. Another method to stop the progression into cancer cells is applying by applying certain creams to the patchy area, called 5-FU or Imiquimod. This method is more effective and clears unhealthy cells in a much higher percentage than the freezing treatments. This is because the cream may cover a wider surface and kills unhealthy cells that are otherwise invisible. There are some side effects to these therapies, including burning, redness, and irritation of the skin. Talk to your doctor about the treatment that is right for you.



Additional Resources:

For more information:

National Cancer Institute

www.cancer.gov/cancertopics/types/skin

Prevention and screening for skin cancer:

www.cancer.gov/cancertopics/pdq/prevention/skin/Patient/page3

For Skin cancer support:

[The Skin Cancer Foundation - SkinCancer.org](http://www.skincancer.org/)

www.skincancer.org/

Key Words:

Actinic keratoses

Topical 5-FU treatment

Imiquimod

Squamous cell skin cancer

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