Actinic Keratosis

INFORM™ DIAGNOSTICS

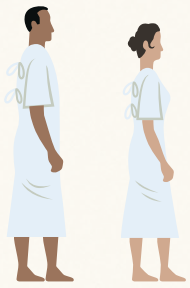
What is actinic keratosis?

Actinic keratosis is a common condition that affects about 58 million Americans. The word actinic describes any type of light that can cause a chemical reaction to occur. The most common "actinic light" however, is sunlight. The chemical reaction caused by sunlight includes photosynthesis in plants, but the ultraviolet light (the one we can't see), also causes a reaction in the epidermis to produce tanning and other skin changes.

The word keratosis describes an abnormal growth of the epidermis. Keratin, a protein found in skin, hair and nails, is part of the epidermis. Therefore, actinic keratosis means there is a sunlight-induced change in the skin.

What this really means

Healthcare professionals know that actinic keratosis is an abnormal growth in the epidermis. This occurs as a reaction of excessive exposure to the sunlight's ultraviolet rays. Normally several keratoses, rather than a single keratosis, will develop on the skin.



Actinic keratosis is a skin condition that occurs as a reaction by the epidermis to excessive exposure of sunlight.

They're most often diagnosed on areas of skin frequently exposed to the sun; particularly the face, ears, lips, bald scalp and also the backs of hands, shoulders and neck.

How is actinic keratosis diagnosed at the lab?

Tissue from a biopsy is sent to a pathology lab. There the tissue is prepared on glass slides and reviewed by a pathologist, a clinician who has specialized in the diagnosis of disease. At Inform Diagnostics, all of the pathologists have further specialized in their specific field of practice, such as dermatopathology for dermatology conditions.

The pathologist looks for abnormal cellular changes under a microscope. He or she interprets the findings under the microscope in the context of the clinical information provided by the healthcare provider. Some cases require additional special analysis to evaluate proteins, RNA and/or DNA.

At Inform Diagnostics, difficult and unusual cases are reviewed together by our specialists at large multi-headed microscopes to ensure the most accurate and definitive diagnoses.

The pathologist creates a pathology report with all the important findings, including critical information to help guide treatment and assess prognosis, which is sent back to the healthcare provider.

Reasons for concern

An abnormal skin growth, like actinic keratosis, that is left untreated, can lead to a type of skin cancer called squamous cell carcinoma (SCC). SCC is one of the lesions in non-melanoma skin cancer (NMSC) and forms in the epidermal layer. NMSC is very common, typically slow growing, and doesn't usually spread when treated early. Each year, almost 3 million Americans are diagnosed with NMSC.

A melanoma is another category of skin cancer. This condition originates in the melanocytes—those are cells that produce the pigment melanin that cause skin to tan, and freckles or moles to develop. A melanoma has a higher risk of spreading to other parts of the body.

Actinic Keratosis

INFORM DIAGNOSTICS

Treatments for actinic keratosis

Treatments are done in the healthcare professional's office and most commonly include freezing, chemical peel techniques, surgical removal, or a prescription medicine the patient applies at home.

Be in control, know the risks, take prevention!

Being exposed to ultraviolet light from the sun or tanning beds increases a person's risk for developing these lesions—especially for fair-skinned people with light-colored eyes. Here are some other risk factors:

- People with weakened or immune system problems such as HIV/AIDS, or organ transplant
- Working outdoors on a regular basis
- Contact with certain chemicals, such as coal or tar
- Taking medicine or having a condition that increases sensitivity to sunlight

Preventive measures should always include protecting skin outdoors. People should wear a hat to shade the face, gloves, and garments that protect arms and legs. It's important to minimize sun exposure between 10:00 a.m. and 4:00 p.m. and wear a waterproof UVA and UVB sunscreen.

Learn more!

These trusted resources can provide more information.

www.skincancer.org

www.nlm.nih.gov/medlineplus/ency/article/000827.htm

Headquartered in Irving, Texas, **Inform Diagnostics** is a premier national provider of the highest-quality anatomic pathology services, primarily in the fields of breast pathology, dermatopathology, hematopathology, gastrointestinal pathology, and urologic pathology. The company's pathologists—all fellowship-trained subspecialists—utilize state-of-the-art laboratories. Inform Diagnostics continuously improves diagnostic precision through a unique consensus approach, rigorous quality assurance, comprehensive expertise, ongoing education and research, and close relationships with clinician clients.
Find more patient information and resources on our website at www.InformDiagnostics.com.