

Disease Report #REP-202505-VGWH

Report Details

Report Number: REP-202505-VGWH

Date: 20 May 2025

Disease: Actinic Keratoses or Bowen's disease



Diagnosis and Recommendations

Health Report: Actinic Keratoses and Bowen's Disease

I. Medical Description:

Actinic keratoses (AKs) and Bowen's disease are precancerous skin lesions caused by cumulative sun exposure. AKs are rough, scaly patches that typically appear on sun-exposed areas of the skin. Bowen's disease, also known as squamous cell carcinoma in situ, is a more serious form of AK that is a flat, reddish or brownish patch or a slightly raised, crusted lesion. While both are precancerous, Bowen's disease has a higher likelihood of progressing to invasive squamous cell carcinoma if left untreated. The key difference lies in the depth of the skin affected: AKs are superficial, while Bowen's disease involves the full thickness of the epidermis.

II. Common Symptoms:

Actinic Keratoses (AKs): *Rough, scaly, sandpaper-like patches; may be pink, red, brown, or flesh-colored; often slightly raised; may be itchy or tender; usually small (less than 1cm).*

Bowen's Disease: Flat, reddish or brownish patch; may be scaly or crusted; can be larger than AKs; may be slightly raised or flat; may be itchy or bleed easily; often single lesion but can be multiple.

III. Causes and Risk Factors:

The primary cause of both AKs and Bowen's disease is chronic exposure to ultraviolet (UV) radiation from sunlight or tanning beds. Risk factors include:

Fair skin: *Individuals with lighter skin tones are more susceptible.*

Age: The risk increases significantly with age, as cumulative sun damage builds up over time.

Weakened immune system: *Individuals with suppressed immune systems are at higher risk of developing and progressing to more serious forms.*

History of sunburns: Severe sunburns, particularly in childhood, increase the risk.

Chronic exposure to UV radiation: *Working outdoors, living in sunny climates, and frequent tanning bed use significantly raise the risk.*

Genetic predisposition: Some individuals may have a genetic predisposition to developing these lesions.

IV. Preventive Measures:

1. **Sun Protection:** Wear broad-spectrum sunscreen with an SPF of 30 or higher daily, even on cloudy days. Reapply every two hours, especially after swimming or sweating.
2. **Protective Clothing:** Wear protective clothing, such as long-sleeved shirts, pants, and a wide-brimmed hat, when exposed to the sun.
3. **Seek Shade:** Limit sun exposure during peak hours (10 am to 4 pm).
4. **Avoid Tanning Beds:** Tanning beds emit harmful UV radiation and should be avoided entirely.
5. **Regular Skin Exams:** Perform monthly self-skin exams to check for any changes in moles, freckles, or the appearance of new lesions. See a dermatologist annually for a professional skin exam.

V. Diagnostic Tests:

Visual Examination: *A dermatologist will visually examine the lesion(s).*

Biopsy: A small sample of tissue is removed and examined under a microscope to confirm

the diagnosis and differentiate between AKs, Bowen's disease, and squamous cell carcinoma. This is the definitive diagnostic test.

VI. Suggested Treatments and Medications:

Treatment options depend on the size, number, and location of the lesions, as well as patient factors. Options include:

Cryotherapy (freezing): *Freezing the lesion with liquid nitrogen.*

Curettage and electrodesiccation: Scraping off the lesion and then using an electric needle to destroy any remaining cells.

Topical medications: *Creams containing fluorouracil (5-FU), imiquimod, or diclofenac can be applied to the affected area.*

Photodynamic therapy (PDT): A photosensitizing drug is applied to the skin, followed by exposure to a specific type of light that activates the drug and destroys the abnormal cells.

Surgical excision: *Surgical removal of the lesion, often used for larger or more concerning lesions.*

VII. Lifestyle and Dietary Recommendations:

Maintain a healthy diet: A diet rich in fruits, vegetables, and antioxidants may help support overall skin health.

Limit alcohol consumption: *Excessive alcohol consumption can increase the risk of skin cancer.*

Quit smoking: Smoking increases the risk of developing skin cancer and impedes healing.

Manage stress: Chronic stress can negatively impact the immune system, increasing susceptibility to disease.

Disclaimer: This information is for educational purposes only and should not be considered medical advice. It is essential to consult with a dermatologist or healthcare professional for diagnosis and treatment of actinic keratoses and Bowen's disease. Early detection and treatment are crucial to prevent progression to more serious forms of skin cancer.