



“What’s this on my head?”

Benjamin Barankin, MD, FRCPC

A 62-year-old male presents with a several-year history of scaly, red papules on his forehead and temples. He has similar lesions on his dorsal hands and distal forearms. He worked as a lifeguard in his youth and then as a landscaper. He has diabetes for which he is on glyburide and metformin.



Figure 1. Scaly, red papules on forehead.

1. What is the most likely diagnosis?

- Squamous cell carcinoma
- Actinic keratosis
- Allergic contact dermatitis
- Xerosis
- Seborrheic keratosis

2. Which of the following areas are least likely to be affected?

- Arms
- Lower legs
- Upper lip
- Scalp
- Cheeks


3. Which of the following management options could you employ?

- Topical imiquimod
- Topical 5-fluorouracil
- Glycolic peels
- Liquid nitrogen cryotherapy
- All of the above

Actinic keratoses (AK) are the most common pre-malignant lesions observed in fair-skinned Caucasians after chronic sun exposure. The most common locations include the face, ears, forearms and dorsal hands, but any location that has received chronic sun exposure is at risk. Individuals living

closer to the equator and with outdoor occupations are at greatest risk. Typically, there is evidence of other photodamage, including solar elastosis, lentiginosities, telangiectases and wrinkling.

Lesions present as rough hyperkeratotic and scaly papules with slight surface scale which measure several millimeters in size. If left untreated, a small percentage can develop over time into squamous cell carcinoma. So treatment is advised; lesions can also spontaneously resolve or remain dormant.

Although much of the damage has been done, patients should still be advised regarding sun protection and sunscreens to prevent new lesions. Topical 5-fluorouracil, imiquimod and less commonly, diclofenac, have been used successfully. Photodynamic therapy, dermabrasion and chemical peels have also shown benefit for widespread lesions. If there are only a few lesions, liquid nitrogen cryotherapy is an effective option, although care must be taken to avoid hypopigmentation and blistering. More hyperkeratotic lesions can be treated with curettage, although biopsy should be strongly considered to rule out invasive squamous cell carcinoma. 

Dr. Barankin is a Dermatologist practicing in Toronto, Ontario.

Answers: 1-b; 2-c; 3-e