

ACTINIC (SOLAR) KERATOSIS

Actinic Keratosis (A.K.) usually present as superficial, lightly scaly, roughening of the skin, which are often more easily felt than seen. They are usually small, (less than 10mm), discrete lesions and may be single or multiple (non – symmetrical). They are normally found on the light exposed areas such as the face, bald scalp, ears, back of the hands and lower legs in women. They are more common in people with fair skin (Type 1 and 2), who have been exposed to a lot of ultra violet radiation as a result of their age, occupation, hobbies or from living in a warm climate for a few years.

A.K.'s are usually pink or light red in colour but can sometimes be lightly pigmented (brown). Overlying scales should be gently scraped away with a scalpal blade to ensure there is no ulceration or induration (hardening) of the underlying skin. A.K.'s are normally macular (flat) and the skin texture should feel absolutely normal, apart from slight roughening on the surface. If the lesion is raised or ulcerated, a biopsy should be taken (e.g. 3mm. punch biopsy) for a histological diagnosis.

There is normally other signs of excessive exposure to ultra – violet radiation on the skin, such as wrinkles, thinning of the skin, redness or yellow discoloration of the skin, pigmented macules on the face and back of the hands, senile comedones or actinic chelitis.

Sometimes A.K.'s can have very thick overlying scales, especially on the dorsum of the hands and occasionally can present as a cutaneous horn. However, an early squamous cell carcinoma (S.C.C.) can also present like this. The thick scale or cutaneous horn should be removed and a biopsy taken from the underlying lesion if there is any doubts as to the diagnosis.

Differential Diagnosis

A.K.'s can easily be confused with an early S.C.C. or an area of Bowens' Disease. However, with these lesions the redness and scaliness is usually more pronounced and the lesions are usually papular (i.e. raised up off the skin), ulcerating or may cause induration of the skin (alteration of the texture of the skin), which is often more easily felt than seen.

On the face, A.K.'s can be confused with mild Seborrhoeic Dermatitis (look for other clues of this disease such as dandruff in the scalp, a rash over the sternum) or Psoriasis. (check elbows, knees, groin and nails).

DLE/ SLE can also cause a rash similar to A.K.'s but the lesions are usually more symmetrical (a butterfly rash on the face) and you may see follicular plugging where the scales seem to extend down the hair follicles, resulting in a spiky undersurface when they are lifted off. DLE/SLE affects the outer ear canal, which would be unusual for A.K.'s.

Small flat Seborrhoeic Keratosis can mimic A.K.'s. However, Seborrhoeic Keratosis are usually brown papular (raised) and have an oily rather than a scaly surface.

A pigmented A.K. could mimic a malignant melanoma and if there is any doubt a biopsy should be taken.

Natural History:

Some A.K.'s may resolve spontaneously over time. However, a small percentage (0.5 to 2%) may go on to develop into a Squamous Cell Carcinoma, if left untreated. When left untreated, A.K.'s can also be uncomfortable and unsightly. Most A.K.'s should be treated, particularly in younger patients or fit elderly patients.

Treatment Choices:

- “Efudix cream” (Fluouroucil Cream). This cytotoxic agent seeks out and stimulates an inflammatory reaction in the dysplastic cells and will selectively destroy both the A.K. and any invisible adjacent dysplastic areas.
- “Solaraze Gel” (Diclofenac) apply b.d. for up to 3 months.
Cryosurgery (usually an open spray technique with a 10 second freeze and one freeze thaw cycle).
- Excision

All patients should be given advise on protecting their skin from ultra – violet light (a broad rimmed hat, appropriate clothing and a total sunblock). Any area of A.K. that fails to respond to treatment should be biopsied for histological diagnosis. All patients should be followed – up annually as new areas of A.K. are liable to crop up periodically and these patients are at high risk of developing skin cancers in the area affected by the A.K. and in all other light exposed areas of the body.