NHS
Worcestershire Area
Prescribing Committee

Actinic (Solar) Keratosis (AK)

November 2017

An actinic keratosis is a common, UV induced, scaly or hyper-keratotic lesion which has a very small potential to become malignant (about 1:500 per year).

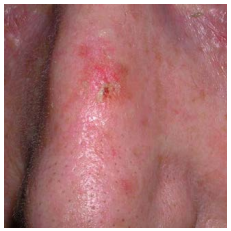
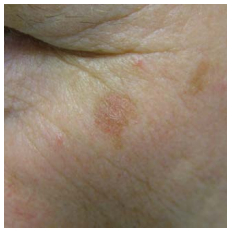
Management can be in primary care, often only with advice:

- Sun avoidance and sun protection to reduce recurrence and further skin damage.
- Self-monitoring with patients encouraged to report any changing keratosis.

High risk patients should be referred (see flow chart):

- Past history of skin cancer, those with extensive UV damage, immunosuppressed patients or the very young
- High density AK or multiple lesions where a second opinion may be required to minimise risk of over-looking a higher grade lesion
- Those with lesions that are rapidly growing, have a firm and fleshy base and/or are painful or are not responding to treatment.

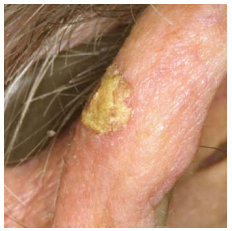
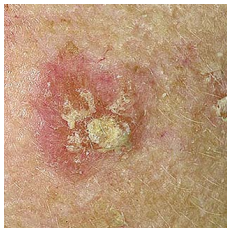
Clinical Grading (from Primary Care Dermatology Society)

Grade I

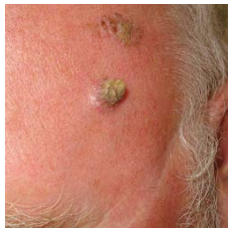
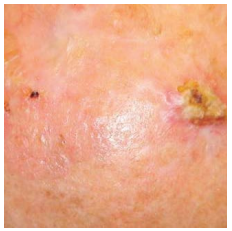
Flat, pink maculae without signs of hyperkeratosis and erythema. Often easier felt than seen.

Flat erythematous macules with or without scale and possible pigmentation.

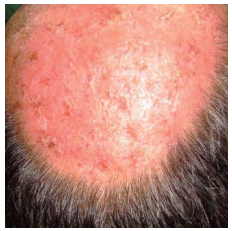
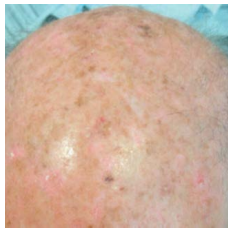
Grade II

Moderately thick hyperkeratosis on background of erythema that are easily felt and seen.

Grade III

Very thick hyperkeratosis, or obvious AK, differential diagnosis includes thick IEC (intra-epidermal carcinoma or SCC).

Field Damage

Large areas of multiple AKs on a background of erythema and sun damage.

Review November 2020

Actinic Keratosis - Treatment Pathway for primary care

Single/several discrete lesions **(Grade I or Grade II)**

No treatment: patients with a small number of lesions, especially if reduced life expectancy.

5% Fluorouracil (Efudix®)

0.5% Flurouracil & 10% salicylic acid (Actikerall®)

Cryotherapy may be useful if only a few lesions

Grade III
Differential diagnosis includes thick IEC and SCC : Shave biopsy, curettage and cautery x2 or x3

Multiple lesions &/or **field change**

5% Fluorouracil (Efudix®)

Ingenol mebutate (Picato): consider where a longer duration of treatment (2-4 weeks) may be difficult. e.g. elderly men with AKs on scalp who live alone.

Imiquimod 5% (Aldara®)

When to refer:

High risk patients
Consider referral to secondary care or accredited GPwSI

- Extensive UV damage
- Immunosupressed patients
- Very young.

Red Flag Symptoms
Refer to secondary care as a priority 2WW

Lesions that are:

- rapidly growing
- becoming more raised
- have a firm and fleshy base
- becoming more tender/painful
- ulcerated.

Lesions that do not respond to treatment

REMEMBER:

Sun protection all year round:

Sunblock (SPF50) daily; avoid sun exposure by covering up; wear a hat with a brim; look for other signs of sun damage/malignancy

Treatment

Step 1: general measures - appropriate for all patients

- AK are a marker of sun damage and so a thorough skin examination is needed to look for more serious sun-related skin tumours.
- Advise patients on UV protection including the need to wear a hat - up to 25% of AK will resolve if patients adhere to advice.
- The use of a moisturiser two to three times a day can be helpful in differentiating between areas of normal and abnormal skin.
- Once patients start to develop AK they will almost certainly develop more. Advise that the aim of any treatment is to reduce the total number of AK on the skin at any one time.
- Education - inform patients which skin changes need to be reported. Transformation into an SCC can be suggested by recent growth, discomfort, and ulceration / bleeding. Patients also need to report any other skin lesions they are not familiar with.

Step 2: Observation

Not all patients need treating e.g. patients with smaller numbers of lesions, especially if they have a reduced life expectancy - such patients should be given a choice or whether or not they wish to have their lesions treated.

Specific Treatments

All topical treatments cause inflammation which indicates their desired action against abnormal cells. If severe the treatment should be stopped until the reaction subsides and then restarted, perhaps at a reduced frequency. Patients should be warned to expect this effect.

Grade I and Grade II

Treatment choices – lesion specific treatment

- 5% Flurouracil (Efudix®) cream 0.5%
- Cryotherapy is useful if only a few lesions
- Fluorouracil and 10% salicylic acid (Actikerall®) solution.

Grade III

- Shave biopsy
- Cautery
- Curettage

Field changes

- 5% Flurouracil (Efudix®) cream 0.5%
- Ingenol mebutate (Picato®)
- Imiquimod (Aldara® 5%)

Product:	Directions for use and maximum skin area:	Pack size:
5% Flurouracil (Efudix®)	Apply twice a day for 21 days. Maximum area of skin treated at one time is 500 cm^2 (e.g. 23 cm × 23 cm).	40g
Fluorouracil and 10% salicylic acid (Actikerall®)	Apply once daily for up to 12 weeks. Reduce to three times weekly if severe adverse effects occur. Max 25cm^2 area to be treated at any one time	25ml
Ingenol mebutate (Picato®)	• Face or scalp: apply contents of one 150 microgram/g tube to affected area over 25cm^2 once daily for 3 days • Trunk or extremity: apply contents of one 500 microgram/g tube to affected area over 25cm^2 once daily for 2 days	150 microgram/g gel, 3 x 0.47g tubes 500 microgram/g gel, 2 x 0.47g tubes
Imiquimod (Aldara® 5%)	• Aldara® is licensed for the face and scalp. It should be used 3 times a week for four weeks, after this the treatment the area needs to be re-assessed and another four weeks treatment initiated if needed • **Zyclara® is NOT SUPPORTED FOR USE IN WORCESTERSHIRE**	12 x 250mg sachets

More information:

British Association of Dermatologists' guidelines for the care of patients with actinic keratosis 2017: *http://bit.ly/2k9ywMa*
Patient information leaflet: *http://bit.ly/2kalVHe*
Primary Care Dermatology Society: *http://bit.ly/2ng858H*