Managing actinic keratosis

Aim
This pathway is designed to promote the management of patients with actinic keratos (AK) in primary care, thus improving patient care and reducing referrals to secondary care. It has been supported by the Dermatologists at Royal Hallamshire Hospital.

Background
- NICE estimates that over 23% of the UK population aged 60 and above have AKs
- Approximately 20% of AKs spontaneously resolve over a 1-year period. Some persist and a small number progress to squamous cell carcinoma (SCC). For a person with an average of 7.7 lesions, the probability of at least 1 lesion transforming to SCC in a 10-year period is ~10%.

Who?
All patients diagnosed with AK by the GP in the community
Except: Immunosuppressed, especially those post transplant who are at higher risk of SCC

Features of AK:
- Commonly develop on sun exposed sites in older people
- Forehead, face, back of hands, bald scalp of men, and ladies legs
- Early lesions may be red patches and produce pin-prick sensation. Later a sand paper roughness can be felt. Some become rough, raised and irregular, like stuck-on cornflakes

Beware rapid growing, painful, ulcerated or indurated lesions - these are signs of SCC and may warrant a 2 Week Wait referral.

If there’s a thick scale or hyperkeratosis-- take it off (can soften with emollient over few days and ask to come back) & look beneath as may be a hidden area of raised base or ongoing ulceration!

For more information on stable typical AK see:
http://www.pcds.org.uk/clinical-guidance/actinic-keratosis-syn.-solar-keratosis#management
http://www.dermnetnz.org/lesions/solar-keratoses.html

Management
Management flow chart

Monitoring
Arrange follow up to check for resolution at about 12 weeks to consider change of treatment, a repeat course (patient concordance) or if no improvement or diagnostic uncertainty consider referral to Dermatology for a biopsy.
How to use 5-fluorouracil cream (Efudix® leaflet)
How to use ingenol (Picato® leaflet)
Sun protection leaflet
Skin Cancer leaflet.

Any features of malignancy as above
Diagnostic uncertainty
• not responding to treatment as per management flow chart

If a referral is required book against the following on the Choose and Book system:
Specialty: Dermatology
Clinic Type: Not otherwise specified

If there is concern regarding skin cancer then refer via the 2 Week Wait pathway

http://www.bad.org.uk/healthcare-professionals/clinical-standards/clinical-guidelines
http://www.pcds.org.uk/clinical-guidance/actinic-keratosis-syn.-solar-keratosis#management

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Bibliography
5. Other references: BNF & product SPCs
Actinic Keratosis


Any features of malignancy?
Remove surface scale if needed and examine base
- Indurated/tender base
- If any diagnostic uncertainty
- Lesion with rapid onset, indurated inflamed base, immunosuppressed patient or >1cm

YES

If malignancy suspected, refer to Dermatology through 2 Week Wait referral;
If diagnostic uncertainty and without malignant suspicion, refer routinely

NO

General conservative management
- Education
- www.bad.org.uk - Patient Information Leaflets
- Skin cancer risk and danger signs - see below patient information leaflet
- Sun protection and emollients - Progression of very early AK lesions and AK recurrence may be reduced by daily use of an appropriate sunscreen (SPF 30 and above)

Active management
First line
- *Diclofenac 3% (Solaraze®) for 60-90 days, (the size of a pea) of the gel is used on a 5 cm x 5 cm lesion site
- 5% 5-fluorouracil cream (Efudix®) and should not exceed 23cm x 23 cm (Apply once or twice daily for 3 to 4 weeks, depending on site) Patient Information sheet

Second line
- Ingenol mebutate gel (Picato®▼) NB only licensed for 5cm x 5cm Patient Information sheet
  - on face and scalp lesions, apply 150 micrograms/g gel once daily for 3 days
  - on trunk and extremities, apply 500 micrograms/g gel once daily for 2 days
- Cryotherapy - can be used for isolated lesions

Review at 12 weeks post treatment and if not clear consider referral to Dermatology

Medicines recommended in the AK pathway are classified as ‘GREEN’
5-fluorouracil cream (Efudix®) for actinic keratoses

Actinic keratoses occur in sun-damaged skin, usually as a result of years of sun exposure. They appear as rough scaly spots on the face, scalp, backs of the hands and forearms. They are often treated because they are itchy, sore or unsightly and rarely may become cancerous.

- 5-fluorouracil cream removes the sun-damaged skin cells in actinic keratoses, allowing new healthy skin to grow. It is particularly useful for treating actinic keratoses that occur over a wide area.

- **Application:** apply a thin layer of 5-fluorouracil cream at night to the affected area using a cotton bud or gloved finger, avoiding skin creases such as the eyes and lips. Wash it off in the morning. Apply every night until the skin becomes red and tender. The skin must reach this point as it signals effective treatment. Depending on the skin type this takes 10-28 days to occur, with a wide variation between individuals.

- If the skin does not become red and sore by the end of 2 weeks then start to apply 5-fluorouracil cream **twice** daily until the skin does become red and tender. **This means the cream is working!** Then stop applying the 5-fluorouracil cream and allow the skin to heal. The healing may take 2-3 weeks. Do not continue treatment longer than 4 weeks total.

- **Do not to treat too large an area at one time.** The skin can become very sore; do not exceed areas larger than 23cm x 23cm.

- **Ask your GP to review any actinic keratoses that do not improve after 12 weeks with this treatment as they may require another method of treatment or a biopsy for diagnosis.**

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Patient Information

Ingenol gel (Picato®) for actinic keratoses

What is Picato®?

Picato® (ingegol mebutate) is a gel that your doctor has prescribed for the treatment of non-hyperkeratotic and non-hypertrophic actinic keratosis (AK).

It works by removing the sun damaged cells in your skin. The gel also activates your body's defences, meaning that it continues to work for several weeks after you have completed your treatment.

It is important that you read the 'Patient Information Leaflet' in your Picato® box before you start the treatment.

How to use Picato®

- Remember to store your treatment in the refrigerator
- Always use your treatment as instructed by your doctor
- You will only need to apply the gel for 2 or 3 days depending on where you use it
- Use all the contents of a tube with each application

Where to apply

[Diagrams showing application areas]

Step A
Open one tube and squeeze contents of tube onto finger

Step B
Apply product to treatment area (25 cm²). Allow to dry for 15 minutes

Step C
Wash hands

- After 8 weeks, your actinic keratosis should be completely gone or much smaller
What to expect when using Picato®

Picato® is a 3 (treating face or scalp) or 2 (treating body, arms or legs including hands or feet) day treatment, which begins to work straight away. As a result, you are likely to see reddening of the skin, flaking, scaling, puffiness or crustng within the first day.

Skin responses are expected, as your treatment removes the sun damaged skin cells. These will normally heal within 2 weeks if treating your face or scalp; or 4 weeks if you are treating your body, arms or legs (including hands or feet). See the 'Patient Information Leaflet' which can be found within the Picato® box for more information.

Below are images of facial skin responses, and how they typically clear up and disappear over time:

![Before treatment](image1)
![Day 4](image2)
![Day 15](image3)

Any skin responses from using your treatment will normally peak during week 1.

By day 15 any skin responses on your face or scalp are likely to be healed.

Even though some patients do not experience any skin responses when using Picato®, this does not mean that the treatment is not working.

If you have any questions around your treatment contact your doctor or pharmacist.

**QualityCare™**

The dedicated QualityCare™ nurse support line is there to offer you additional advice and information about using Picato®, actinic keratosis and how to protect your skin from further sun damage.

To speak to a member of the nurse team simply call (Freephone) 0800 090 2165
Mon - Fri 8.30am - 6.30pm.
Sun protection - Some simple guidelines

1. Avoid going out into the sun between the hours of 11.00am and 3.00pm. This is when the sun is at its strongest. Plan outdoor activities earlier or later in the day.

2. Protect your skin with clothing, including a brimmed hat, T-shirt and sunglasses when out in the sun. Tightly woven materials such as cotton offer greater protection. Balding men should always wear a hat when outdoors.

3. Sit in the shade but remember that sand, snow, concrete and water can reflect sun into shaded areas so you can still get burnt.

4. Apply sun cream at least 30 minutes before going out in the sun and reapply every 2 hours as long as you are outdoors. Reapply after swimming or any other vigorous activity, sweating, towel drying or if you think it has rubbed off. Use a sun cream which has a sun protection factor (SPF) of 30 or higher, and apply liberally and evenly - more is better in terms of sun protection. Do not forget areas such as the sides and back of the neck, the temples and the ears. Do not rely on sun cream alone. While it does offer protection, physical barriers such as clothes and shade are just as important.

5. Sun creams also have a star rating on the packaging. This indicates the level of protection from UVA which causes skin ageing as well as skin cancer. Choose a sun cream which has a high SPF and a high star rating. The brand does not matter as long as you apply it correctly.

6. Use a sun cream for activities at high altitude such as climbing and skiing, as the risk of burning is greater the higher up you go. The sun can also be stronger in hot countries.

7. You should wear sun cream everyday if you: have fair skin that easily burns, work outdoors, have lots of moles, or have had a skin cancer.

8. Don’t forget to use sun cream on cool and cloudy days as the sunlight is only scattered by clouds and still reaches the earth’s surface. Also, clouds can clear quickly to leave you exposed to strong sunlight. In this country, sun cream should be applied daily from as early as March, through to October.

9. If you develop an allergic reaction (rash) to your sun cream, stop using it and talk to your pharmacist about changing to a different type. If the problem persists, see your GP.

10. Certain drugs or medicines can cause you to be more sensitive to the sun or can cause rashes when you go in the sun. Some perfumes and cosmetics can also do this. Check with your pharmacist or doctor about your medicines as you may need to be extra careful in the sun.

11. Sunbeds can cause sunburn, ageing changes in the skin and can significantly increase your risk of skin cancer. Using a sunbed before you go on holiday does not provide your skin with any extra protection from the sun. There is no such thing as a ‘safe sunbed’.

12. Sunbathing is not recommended. A tan is a sign of damage to your skin.

13. Keep babies and young children out of the sun. Keep them covered using clothes, shade and sun cream to protect them. Teach children simple guidelines about sun protection whilst they are young. Sun damage occurs with each unprotected sun exposure and accumulates over the course of a lifetime.

14. Sunlight helps the skin to produce vitamin D which is important for healthy bones and can prevent other health issues. Small amounts of incidental sunlight, as you might get through daily activities, may help to boost vitamin D levels. However, protecting your skin in the sun from burning should be a priority.

If you are concerned about your vitamin D levels, speak to your doctor who can advise you about adapting your diet to include foods which are naturally rich in vitamin D. In addition, Vitamin D supplements are available to buy from pharmacies, supermarkets and health shops.
Skin Cancer
What to look out for!

There are two main types of skin cancer, malignant melanomas and non melanoma skin cancers.

**Malignant melanomas** - This is the most serious and dangerous type of skin cancer. They grow rapidly, spread early and can be fatal. The warning signs to look out for are any one of the following:

- A mole or freckle that is **getting bigger**.
- A mole or freckle that is **changing shape**; most moles are round or oval with a symmetrical shape. When a mole develops an irregular border it is a bad sign.
- A mole or freckle that **changes colour**; most moles are an even shade of light or dark brown. When a mole develops irregular shades of colour throughout it is a bad sign. If any of your moles develop **any one of the above** signs you should contact your doctor immediately, as early detection and removal of a malignant melanoma can be lifesaving.

Other warning signs to look out for in a mole or a freckle are as follows:
- Itch
- Size greater than the head of a pencil (i.e. <7mm)
- Bleeding and crusting

**Non melanoma skin cancers** - These include basal cell carcinomas (BCC) and squamous cell carcinoma (SCC). SCC's grow slowly and rarely spread beyond the skin unless they are neglected for a long time. BCC's can never spread beyond the skin, no matter how long they are present, so they are not fatal. However, they can spread locally within the skin and cause troublesome ulcers or damage local structures such as the eyes, ears or lips.

The warning signs to look out for are as follows:

- A new growth on the skin which appears for no apparent reason.
- A sore or an ulcer that will not heal after four weeks.
- A persistent isolated scaly patch on the skin that does not clear up with topical creams.

If you have any of these warning signs, please get your doctor to check your skin.

Skin cancer leaflet- Adopted with permission from The Derbyshire Joint Area Prescribing Committee

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