

**DERBYSHIRE JOINT AREA PRESCRIBING COMMITTEE  
(JAPC)**

## Managing actinic keratoses (AK)

### Aim

This pathway is designed to help GPs manage actinic keratoses effectively and reduce referrals to secondary care

### Background

- NICE estimates that over 23% of the UK population aged 60 and above have AKs<sup>1</sup>
- Approximately 20% of AKs spontaneously resolve over a 1-year period<sup>2</sup>. Some persist and a small number progress to squamous cell carcinoma. The presence of ten AK is associated with a 14% risk of developing an SCC within five years<sup>1</sup>.

 <b>Who?</b>	<p>All patients diagnosed with AK in the community</p> <p>Except:</p> <ul style="list-style-type: none"> <li>• Immunosuppressed, especially those post transplant</li> <li>• AKs induced by phototherapy e.g. PUVA for psoriasis</li> </ul>
 <b>Diagnosis</b>	<ul style="list-style-type: none"> <li>• Is there a past or family history of skin cancer or AK?</li> <li>• Is the lesion painful?</li> <li>• How quickly is it growing?</li> <li>• Carefully examine the lesion &amp; the REST of the patient's skin</li> </ul> <p>Features of AK: <a href="https://dermnetz.org/topics/actinic-keratosis">https://dermnetz.org/topics/actinic-keratosis</a></p> <p><a href="https://www.pcds.org.uk/clinical-guidance/actinic-keratosis-syn-solar-keratosis">https://www.pcds.org.uk/clinical-guidance/actinic-keratosis-syn-solar-keratosis</a></p> <ul style="list-style-type: none"> <li>• Commonly develop on sun exposed sites in older people</li> <li>• Forehead, face, back of hands, bald scalp of men, and ladies legs</li> <li>• 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</li> </ul> <p><b>Exclude painful, ulcerated or indurated lesions - these are signs of SCC and warrant a 2WW referral.</b></p> <p><b>If there's a crust – take it off &amp; look beneath!</b></p>
 <b>Management</b>  <b>See flow diagram – appendix A</b>	<p>Cryotherapy or 5-fluorouracil cream (Efudix) are the usual starting points.</p> <p>5-fluorouracil 5% cream (Efudix) is classified as '<b>GREEN</b>' when prescribed in line with the managing actinic keratosis pathway.</p> <p>0.5% 5-fluorouracil/ 10% salicylic acid solution (Actikerall) has a limited role for single hyperkeratotic lesions. Maximum area of skin to be treated at one time is 25cm<sup>2</sup> (e.g. 5cm x 5cm).</p> <p>Diclofenac 3% (Solaraze®) is considered a milder treatment that can be used in any sized area. It is deemed less effective but is usually well tolerated and may be preferred second line in certain circumstances.</p>
 <b>Monitoring</b>	<p>Arrange follow up to check for resolution</p>

 <b>Patient info</b>	<a href="http://www.bad.org.uk">www.bad.org.uk</a> - Patient Information Leaflets <ul style="list-style-type: none"> <li>• Actinic Keratosis</li> <li>• Cryotherapy</li> </ul> PCDS PIL- <a href="https://www.pcds.org.uk/patient-info-leaflets/actinic-solar-keratosis">https://www.pcds.org.uk/patient-info-leaflets/actinic-solar-keratosis</a> Appendix A – Management flow chart Appendix B – How to use 5-fluorouracil cream (Efudix leaflet) Appendix C – Sun protection leaflet Appendix D – Skin Cancer leaflet.
 <b>Referral criteria</b>	<b>Any features of malignancy</b> <ul style="list-style-type: none"> <li>• Thick lesions</li> <li>• Indurated/tender base</li> <li>• Rapid growth</li> <li>• Pain or bleeding</li> </ul> <a href="https://www.bad.org.uk/referrals/actinic-keratoses/">https://www.bad.org.uk/referrals/actinic-keratoses/</a>
<b>Clinic information</b>	If a referral is required book against the following on the Choose and Book system: <b>Specialty : Dermatology</b> <b>Clinic Type: Not otherwise specified</b>  <b>If there is concern regarding skin cancer then refer via the 2Week Wait pathway</b>
<b>Additional Information</b>	<a href="https://www.pcds.org.uk/clinical-guidance/actinic-keratosis-syn-solar-keratosis">https://www.pcds.org.uk/clinical-guidance/actinic-keratosis-syn-solar-keratosis</a> <a href="http://www.bad.org.uk">www.bad.org.uk</a>

### Reference

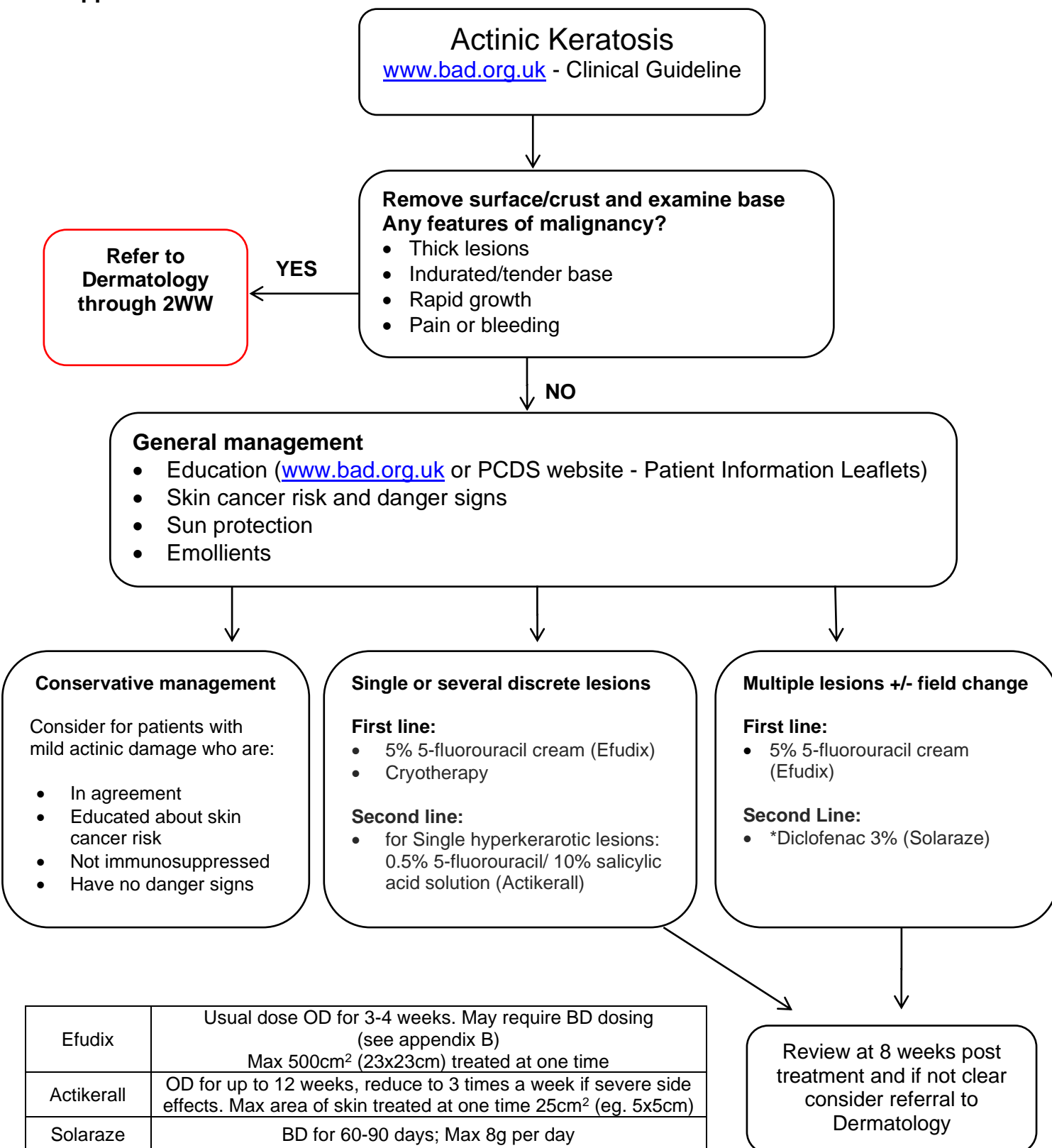
1. Primary Care Dermatology Society- Actinic Keratosis <https://www.pcds.org.uk/clinical-guidance/actinic-keratosis-syn-solar-keratosis>
2. British Association of Dermatologists’ guidelines for the care of patients with actinic keratosis 2017 <https://onlinelibrary.wiley.com/doi/10.1111/bjd.15107>

### Authors/Consultees

Lead authors	Organisation
Dr Graham Colver – Consultant Dermatologist	Chesterfield Royal NHS Foundation Trust
Dr Tanya Bleiker – Consultant Dermatologist	University Hospitals of Derby and Burton NHS Foundation Trust
Dr Kid Wan Shum – Consultant Dermatologist	University Hospitals of Derby and Burton NHS Foundation Trust
Dr Esther Burden-Teh – Dermatology Specialist Registrar	University Hospitals of Derby and Burton NHS Foundation Trust
Dr Mark Wood – GP Clinical Lead, GPSI	Derby and Derbyshire Clinical Commissioning Group, Bakewell Medical Centre
Dr Kath Bagshaw – Assistant Medical Director	Derby and Derbyshire Clinical Commissioning Group
Dr Louise Moss – GPSI	Moss Valley Medical Practice
Dr Justine Reid – GP	Kelvingrove Surgery, Heanor
Dr Elizabeth Riches – GPSI	Chatsworth Road Medical Centre
Derbyshire Guideline Group	Derby and Derbyshire Clinical Commissioning Group

Reviewed (2023) by Derbyshire guideline group in consultation with Dr. Mark Wood (GP, DDICB), Dr. Kid Wan Shum/ Dr. Bleiker (consultant UHDBFT), Dr. Colver (consultant CRHFT)

## Appendix A



**5-fluorouracil 5% cream (Efudix) is classified 'GREEN' when prescribed in line with the managing actinic keratosis pathway**

## Appendix B

### 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. This 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**

2weeks after commencing treatment with cream the keratoses are inflamed



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

## Appendix C: Sun protection leaflet – adopted with permission from RDH

### 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.

## 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. They usually arise from freckles or moles.

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 two to 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**