TREATMENT PATHWAY FOR ACTINIC (SOLAR) KERATOSIS

Description
Actinic keratosis is a common, sun induced, scaly keratotic lesion which has a very small potential to become malignant. There is a high spontaneous regression rate and low rate of transformation – less than 1 in 1000 per annum, but with an average of 7.7 AKs the risk of one transforming in 10 years is 10%* (* De Berker D et al. British Journal of Dermatology 2007;156: 222-230 )

Identify High Risk Patients
Immunosuppressed patients, those with a past history of skin cancer and those with extensive evidence of sun damage; patients with previous history of phototherapy; very young patients or patients with xeroderma pigmentosum consider referral to secondary care or accredited GPwSI. If not high risk then consider treatment as below

Description

1⁰ line

2⁰ line

Further options (on referral)

Grade 1 - Single or few lesions, better felt than seen
Diclofenac 3% (Solaraze)
Ingenol mebutate (Picato)
Imiquimod 5-fluouracil

Grade 2 - Moderately thick lesions (hyperkeratotic), easily felt and seen
5-Fluouracil (Efudix)
Imiquimod (Aldara)
Liquid Nitrogen

Grade 3 - Thick hyperkeratotic lesions
Liquid Nitrogen
Surgical procedure

Field Change - Lesions grouped in same area, with marked background damage
Diclofenac 3% (Solaraze) OR 5-Fluouracil (Efudix)
Ingenol mebutate (Picato)
Imiquimod

➢ Refer high risk, red flag patients or where 1⁰ line, 2⁰ line treatments have failed or are not tolerated

PLEASE NOTE:
1. All topical treatments cause inflammation which indicates their desired action against abnormal cells. If severe then the treatments should be stopped until the reaction subsides and then restarted, perhaps at a reduced frequency. Patients should be warned to expect this effect of the treatment rather than regarding it as an unwanted side effect.
2. Complete clearance of lesions can be delayed several weeks beyond completion of topical therapies.
3. Not all of the topical treatments, have a license for non-facial sun exposed areas e.g backs of hands, but there is no clinical reason why they should not be used on these sites.

General Measures
Applicable to all patients and may be all that is needed for management:
1. AKs are a marker of sun damage: examine other areas of the skin
2. Encourage prevention: sun screen and protection (not available on FP10)
3. Advise patients to report change
4. Consider use of emollients for symptom control
## TREATMENT INFORMATION FOR TOPICAL PREPARATIONS

<table>
<thead>
<tr>
<th>Drug name</th>
<th>Licensed indication</th>
<th>Dose directions</th>
<th>Duration of treatment</th>
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</thead>
<tbody>
<tr>
<td>Ingenol mebutate 150 micrograms/g gel (3 x 0.47g single use tubes)</td>
<td>Cutaneous treatment of non-hyperkeratotic, non-hypertrophic actinic keratosis in adults <strong>on face &amp; scalp</strong></td>
<td>apply once daily</td>
<td>3 days</td>
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<td><em>The content of one tube covers a treatment area of 25 cm² (e.g. 5 cm x 5 cm).</em></td>
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<tr>
<td>Ingenol mebutate 500 micrograms/g gel (2 x 0.47g single use tubes)</td>
<td>Cutaneous treatment of non-hyperkeratotic, non-hypertrophic actinic keratosis in adults <strong>on trunk and extremities</strong></td>
<td>apply once daily</td>
<td>2 days</td>
</tr>
<tr>
<td>Diclofenac 3% gel (50g, 100g)</td>
<td>Actinic keratosis in adults</td>
<td>apply thinly twice daily (Max 8g daily)</td>
<td>60 – 90 days</td>
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<td><em>Normally 0.5 grams (the size of a pea) of the gel is used on a 5 cm x 5 cm lesion site.</em></td>
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<tr>
<td>Fluouracil 5% cream (40g)</td>
<td>Topical treatment of superficial premalignant and malignant skin lesions; keratoses including actinic forms</td>
<td>Apply once or twice daily (max area of skin treated 500 cm², 23 x 23cm)</td>
<td>3-4 weeks</td>
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<tr>
<td>Imiquimod 5% cream (12 x 250mg sachet pack)</td>
<td>Includes clinically typical, nonhyperkeratotic, nonhypertrophic actinic keratoses (AKs) on the face or scalp</td>
<td>Apply three times a week at night (max dose is one sachet)</td>
<td>4 weeks. Assess after 4 week treatment-free interval. Course can be repeated once only.</td>
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</tbody>
</table>

For full details on licensed indication, dosage, administration, contraindications, cautions, drug interactions and adverse effects always check with BNF [www.bnf.org.uk](http://www.bnf.org.uk) or SPC ([www.medicines.org.uk](http://www.medicines.org.uk)).