Actinic (Solar) Keratoses

Actinic keratoses (AK), also known as solar keratoses, are dry scaly patches of skin caused by damage from years of sun exposure. The patches are usually harmless but can be itchy and look ugly. Actinic keratoses are, however, also a marker for future risk of skin cancer development.

For superficial, isolated lesions, which are not causing any discomfort, no specific treatment is required. Patients should be given advice about sun avoidance and protection, as well as the signs of skin cancer formation.

Some patients will have sore, unsightly or widespread lesions, which may justify treatment. The treatment option should be directed at the clinical problem. Some individuals may have isolated lesions in which case a “lesional” treatment would be indicated. Many patients will present with widespread involvement, for these patients the term “field cancerisation” may be used and treatments aimed at treating the whole of the chronically sun exposed site may be indicated.

A variety of treatment options are available including:

- **Cryotherapy**

- **Topical therapy**
  
  **Brand Name and Protocol Notes**
  
  - **Solaraze**
    - Twice daily for 60-90 days: because of the length of treatment needed compliance may be an issue
  
  - **Efudix**
    - Once or twice daily for 3-4 weeks: early & severe inflammatory reaction is normal, typically peaking in the second week
  
  - **Actikerall**
    - Once daily for 6-12 weeks: apply with brush applicator & peel off existing coating before reapplication
  
  - **Aldara**
    - Apply three times a week for 4 weeks: assess after 4 week interval. Repeat if required. Flu like symptoms are occasionally reported
  
  - **Picato 150μg/g gel**
    - Face & scalp: once daily for 3 consecutive days, skin reaction may occur from day one and usually resolves within 2 weeks
  
  - **Picato 500μg/g gel**
    - trunk & extremities: once daily for 2 consecutive days, skin reaction may occur from day one and usually resolve

  *Picato has shown improved compliance, although reactions are similar to other products they resolve more quickly

- **Photo-Dynamic therapy**
The choice of treatment depends on the type of lesion and if they are isolated or widespread.

**Actinic Keratoses (AK)**

**Lesional**

- **Superficial**
  - 5-Flurouracil (Efudix®) cream
    - May be applied once or twice daily for 3-4 weeks
- **Hyperkeratotic**
  - Cryotherapy
  - 5-Flurouracil with salicylic acid (Actikerall®) solution
    - Apply daily with applicator and remove film before reapplication
  - Surgery
    - Curettage for thick lesions
- Imiquimod 5% (Aldara®)
  - May be applied three times a week for 4 weeks.

**Field**

- Diclofenac (Solaraze®) gel
  - May be applied twice daily for 2-3 months
- 5-Flurouracil (Efudix®) cream
  - May be applied once or twice daily for 3-4 weeks
- Ingenol mebutate (Picato®)
  - For scalp and/or face 0.015% gel applied once daily for 3 consecutive days.
  - For trunk and/or extremities 0.05% gel applied once daily for 2 consecutive days
- Imiquimod 5% (Aldara®)
  - May be applied three times a week for 4 weeks.
  - Ingenol mebutate (Picato®)

**Combination**

- Cryotherapy (Undertaken in secondary care) / 5-Flurouracil with salicylic acid (Actikerall®) solution
  - +5-Flurouracil (Efudix®) cream
    - May be applied once or twice daily for 3-4 weeks
  - + Diclofenac (Solaraze®) gel
    - May be applied twice daily for 2-3 months
References


Primary Care Dermatology Society. Actinic (Solar) Keratosis – Primary Care Treatment Pathway April 2014

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