

Tips for recognising and managing pre-malignant skin lesions

Julia Schofield

Learning outcomes

- Common pre-malignant lesions and their management

NICE guidance 2006

Most patients with precancerous lesions and a significant number of patients with low-risk BCC can be safely managed in primary care according to the model proposed in this guidance.* This will require consideration of patient choice and provision of information to patients as well as access to a specialist nurse and other supportive services that are traditionally only available in hospitals.

Guidance on Cancer Services. Improving Outcomes for People with Skin Tumours including Melanoma. The Manual. National Institute of Health and Clinical Evidence 2006.

What 'pre-cancerous' lesions do
you know?

What am I going to talk about?

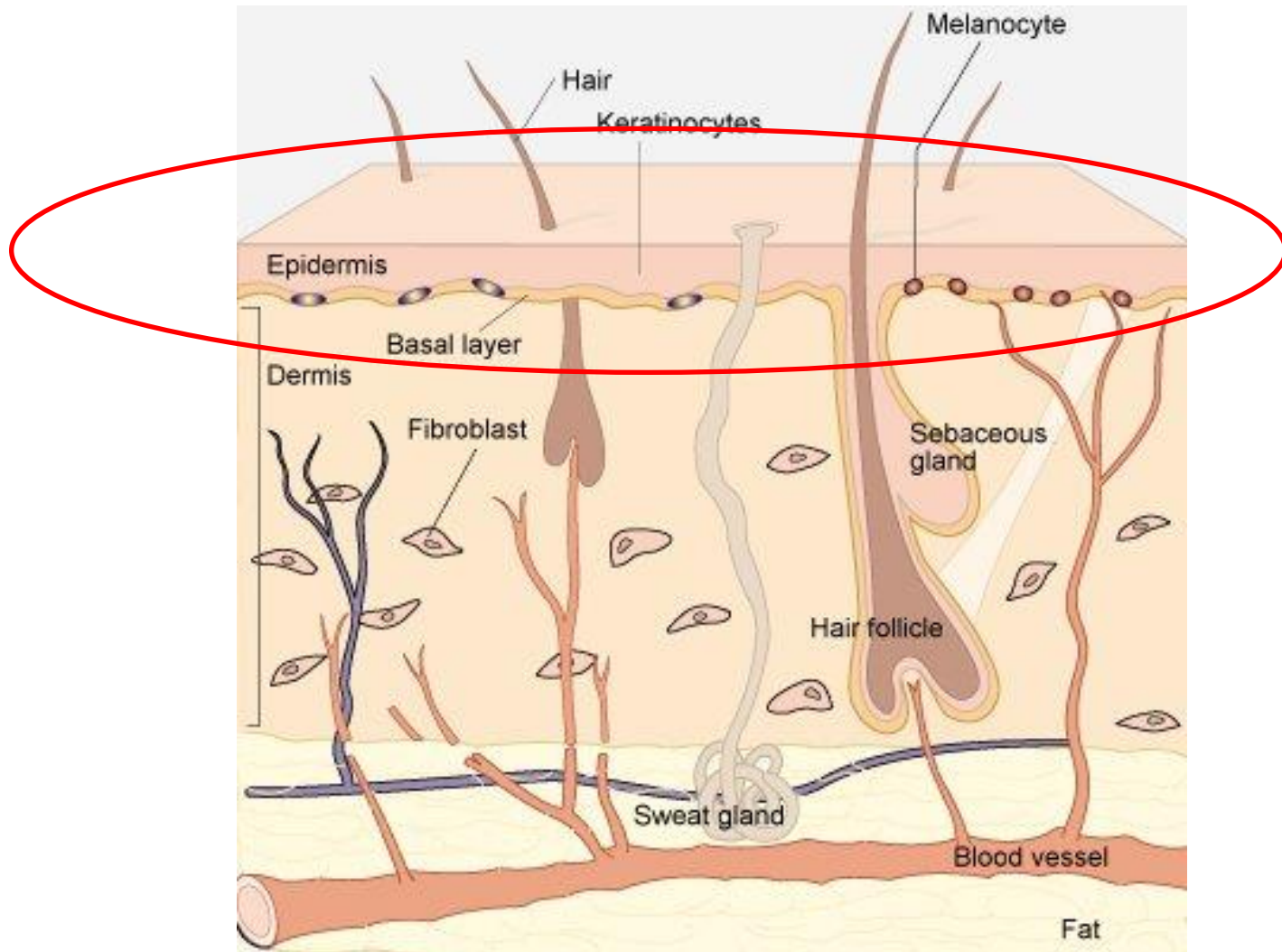
- **ACTINIC KERATOSES**
- Bowen's disease
- Lentigo maligna



What am I going to talk about?

- The natural history of these lesions
- The need (or lack of need) for treatment
- Treatments that can be used in primary care and their evidence base
- Indications for referral and why

Actinic keratoses, Bowen's disease and lentigo maligna



Histology: variable degrees of dysplasia

Actinic keratoses

- Abnormal cell proliferation
- Sun-exposed sites
- Often multiple
- Background erythema
- Superficial keratotic appearance
- **COMMON**



Actinic keratoses

- May present as a cutaneous horn
- Vary in summer and winter
- Langerhan's cells switched on and off
- ?malignant transformation



Actinic keratoses: natural history

Potential evolution in progression of dysplasia

- Bowenoid keratosis
- Bowen's disease
- Squamous cell carcinoma

Is this inevitable?



DETERMINES MANAGEMENT

MALIGNANT TRANSFORMATION OF SOLAR KERATOSES TO SQUAMOUS CELL CARCINOMA

[Robin Marks](#) ^a, [George Rennie](#) ^a, [ThomasS. Selwood](#) ^b

Abstract

1689 people aged 40 years and over were examined over a 5-year period to determine the incidence of malignant transformation of solar keratoses. They were seen on 2 consecutive years on 4267 occasions; a total of 21 905 solar keratoses were present on the first visit. A squamous cell carcinoma (SCC) developed within 12 months on 28 of the 4267 occasions. Where accurate mapping of both SCCs and pre-existing solar keratoses was available, it was found that 10/17 (60%) SCCs arose from a lesion diagnosed clinically as a solar keratosis in the previous year and the other 7(40%) SCCs on what had been clinically normal skin 12 months previously. The risk of malignant transformation of a solar keratosis to SCC within 1 year was less than 1/1000. The cost-effectiveness of treating all solar keratoses to prevent the development of SCC is questionable.

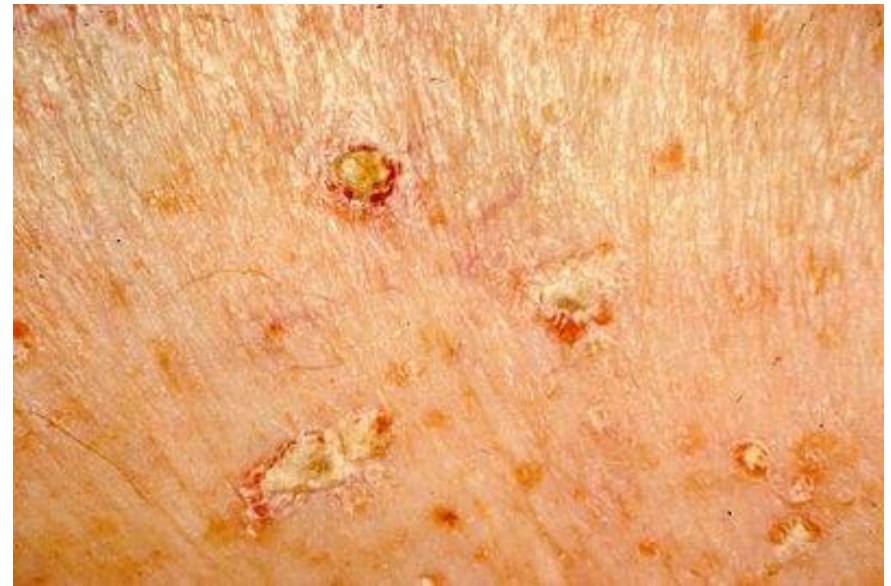
^a Anti-Cancer Council of Victoria, 1 Rathdowne Stre Carlton South 3053, Australia

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Marks et al 1988

Actinic keratoses: who to treat

- ? Multiple lesions: risk of malignant change greatest with more than 10 AKs
- Symptomatic
- Lips, nose, ears and eyes
- Immuno-suppressed patients



Actinic keratoses: worrying features

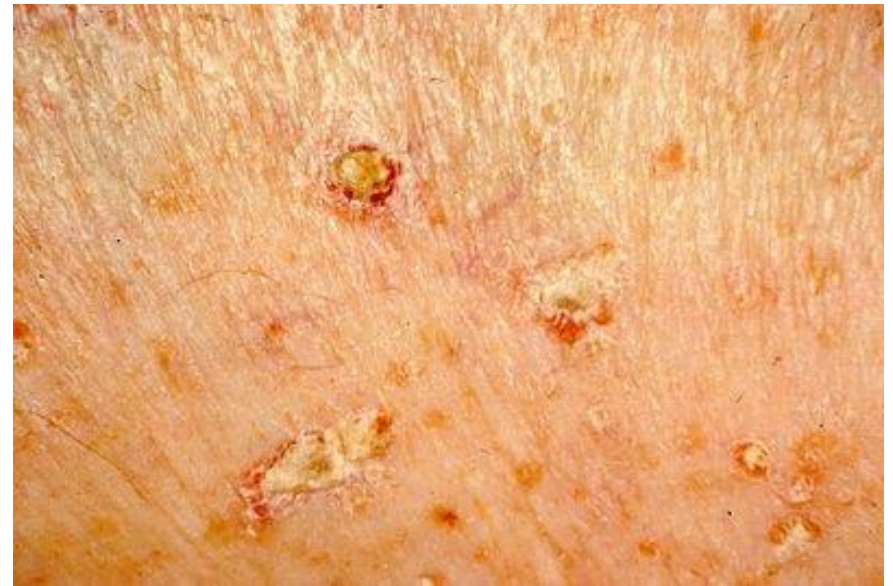
- Thickened, indurated base
- Persistent and enlarging
- LIFT THE CRUST
- If malignant change occurs usually well-differentiated SCC



Actinic keratoses: who **not** to treat

- Immunocompetent
- A few thin lesions
- Take into account age and other co-morbidities.

Not to prevent malignant transformation in everyone!

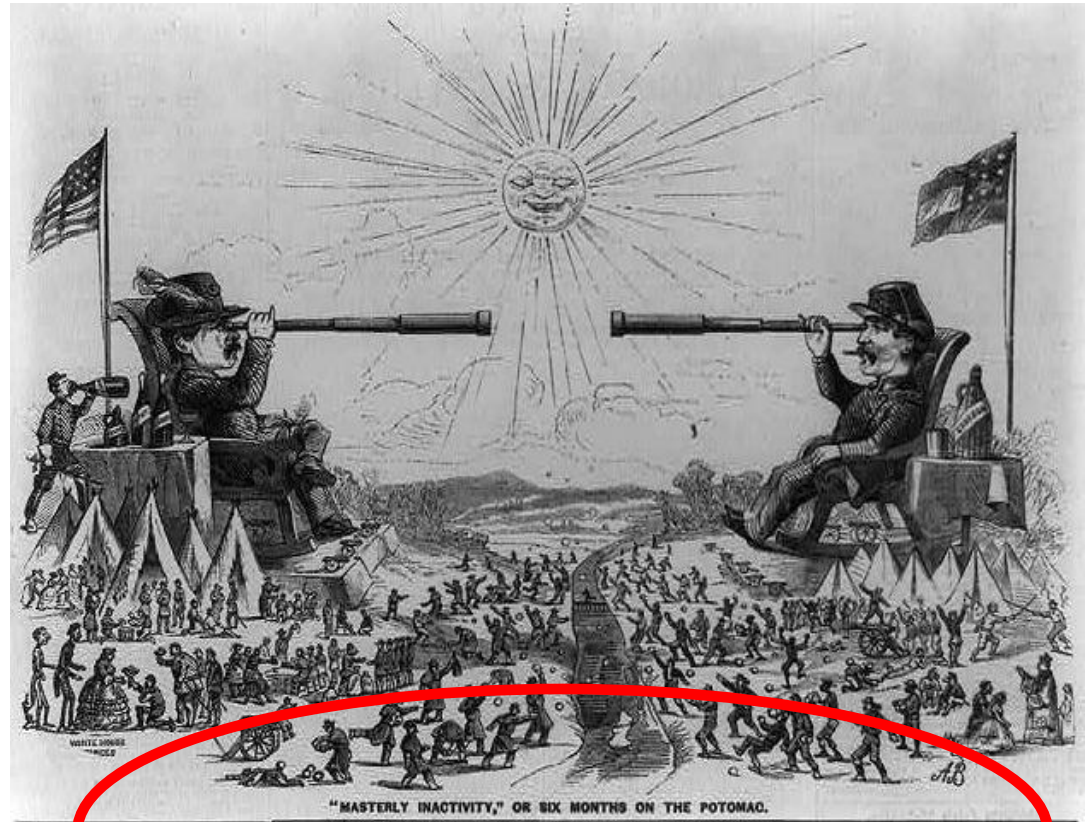


What treatments do we have?

Lesion directed
cryotherapy
curettage
5-fluorouracil 0.5 per cent +
salicylic acid 10 per cent

Field therapies
5-fluorouracil 5 per cent
diclofenac
*ingenol mebutate
imiquimod 5 per cent
*imiquimod 3.75 per cent
photodynamic therapy
*resiquimod

Table 1. Current and emerging treatments for actinic keratoses (*emerging indication)



Masterly inactivity

Masterly inactivity and sun protection



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Keyword,

ORIGINAL ARTICLE

Reduction of Solar Keratoses by Regular Sunscreen Use

Sandra C. Thompson, Damien Jolley, and Robin Marks
N Engl J Med 1993; 329:1147-1151 | [October 14, 1993](#)

Regular use of sunscreens prevents the development of solar keratoses and, by implication, possibly reduces the risk of skin cancer in the long term.

Actinic keratoses: primary care management options

- Topical 5 fluorouracil (Efudix[®])
- Diclofenac gel (Solaraze[®])
- 5-fluorouracil 0.5%/salicylic acid 10.0% (Actikerall[®])
- Liquid nitrogen cryotherapy
- Imiquimod (Aldara[®])
- Curettage and cautery
- Ingenol mebutate (Picato[®])

Efudix: once daily for three weeks



Diclofenac gel (Solaraze[®])

- COX-2 levels increase in response to UV radiation. [17,18](#)
- COX-2
- Diclofenac has potent anti COX-2 activity
- 3% diclofenac in 2.5% hyaluronic acid gel has an effect against AK
- Used twice daily for three months
- 50% clearance at 90 days vs 20% placebo

5-fluorouracil 0·5%/salicylic acid 10·0% (Actikerall[®])

BJD

British Journal of Dermatology

THERAPEUTICS

Low-dose 5-fluorouracil in combination with salicylic acid as a new lesion-directed option to treat topically actinic keratoses: histological and clinical study results

E. Stockfleth¹, H. Kerl², T. Zwingers³, C. Willers⁴

Article first published online: 25 OCT 2011

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Issue



British Journal of Dermatology

Volume 165, Issue 5, pages
1101–1108, November 2011

Actikerall

- Applied with a brush applicator
- Once daily for 6–12 weeks
- NHS list price is £38.30 for a 25ml bottle, which is sufficient for the treatment duration



Liquid nitrogen cryotherapy

- High efficacy rates in retrospective studies for actinic keratoses
- Painful, can induce delayed healing of target lesions
- May result in scarring and pigmentary change

Imiquimod: what is it?

- Immune response modifier
- Marketed as Aldara 5% cream (Meda)
- Licensed for use in treatment of ano-genital warts
- Used for superficial BCCs
- More recently licensed for superficial actinic keratoses



Imiquimod: how is it used?

- Topical to the affected areas
- 3 times weekly for about 6 weeks
- Apply at night wash off in the morning
- Localised immune response marker of efficacy
- Clinical effects are usually localized to the skin
- Occasional distant interferon like symptoms



Garden weed that could help fight off skin cancer: Picato is fast-acting treatment for condition that causes one form of disease

By [JENNY HOPE](#)

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A new treatment for skin damage that can lead to cancer has been created from the sap of a common garden weed.

Picato gel is a fast-acting treatment for actinic keratosis (AK), which appears as red, rough patches of skin often on the face, balding scalp, backs of hands and trunk of the body.

Picato: ingenol mebutate

- 3 days treatment head and two days elsewhere
- One tube per day: box of two or three tubes
- Field treatment
- £65 per course of treatment
- Inflammatory response
- 80% clearance



Actinic keratoses: why refer?

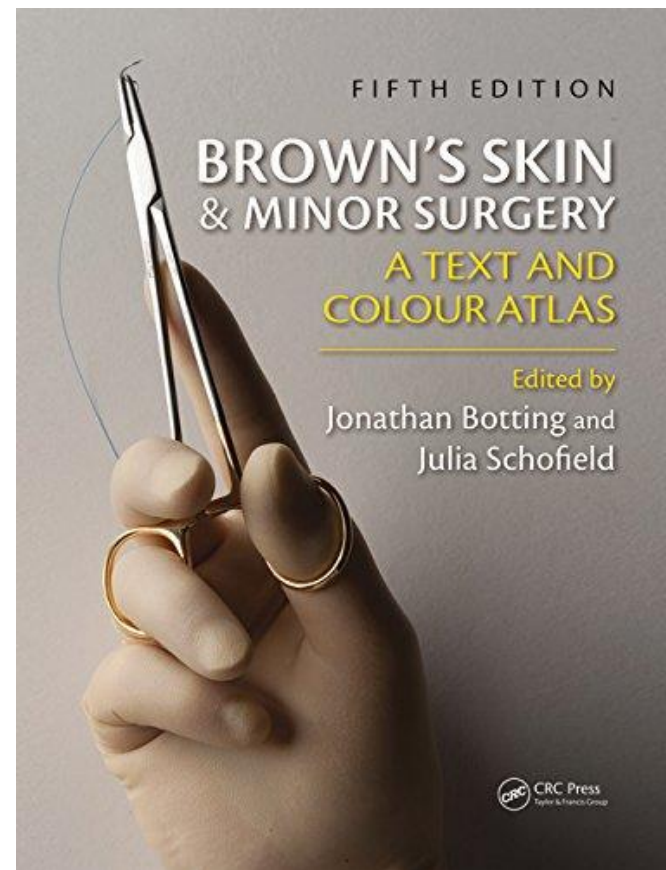
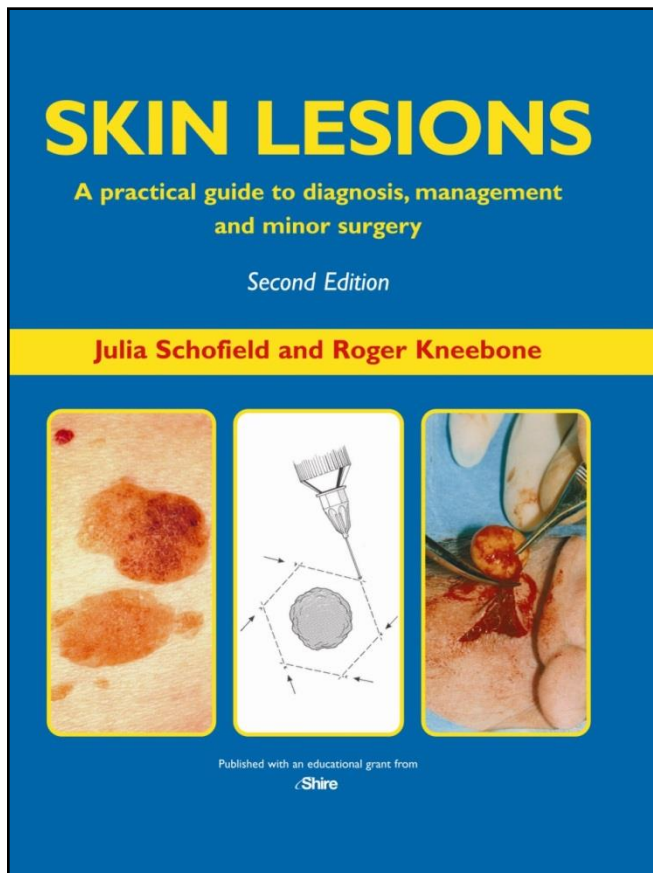
- Diagnostic uncertainty
- Worry about possible SCC
- Extensive field change
- Immunosuppressed patients for acitretin
- For photodynamic therapy



Summary

- Common pre-malignant lesions and their management
- What needs treating and why
- No treatment an option for actinic keratoses
- Refer if worry about SCC risk or development

If you want to read or learn more.....



University of Hertfordshire MSc dermatology skills and treatment

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