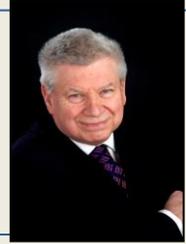


Medicine for Managers

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The Scourge of the Sun

It's been the best summer in Britain in terms of hours of sunshine for the last half-dozen. The sun's great; it makes us feel good and the golden tan it can generate makes us look good as well. Well-tanned people are considered to be healthy but, unfortunately, it is not as simple as that. Repeated exposure to sun or tanning booths can cause a variety of problems over time.

The sun can produce skin changes that accelerate the aging process and can predispose to a variety of changes including skin cancers.

As we get older our skin progressively changes as the elastic fibres gradually break down. The deterioration results in the skin losing its elasticity and it begins to stretch and sag. The shape is lost so that it starts to hang in places. These changes are aggravated by the ultra-violet rays of the sun. Although skin damage is not apparent in young people the effects are cumulative and, with increasing age, the skin adopts its characteristic wrinkled, freckly and coarse appearance.



The skin also becomes more fragile, suffering damage with minor trauma, tearing and bruising easily.

Apart from the obvious cosmetic disadvantages of long-term sun exposure, other changes develop including patchy mottling, visible dilated blood vessels, benign tumours and, most significantly, skin cancers. UV light is, again, the principal culprit and is present in both sunlight and tanning beds.

UV rays can cause sunburn; the body does have a protective mechanism to deal with this and will produce the pigment melanin, which absorbs UV rays and helps protect against sinister skin changes.

The skin becomes darker as more melanin accumulates but this in itself indicates that the skin has become damaged by the sun or

tanning bed. Pale-skinned people have little melanin and are more vulnerable to skin damage resulting in burning and predisposition to cancer.

Skin Cancer is normally one of three principal types. **Basal cell carcinomas** are usually slow-growing, enlarge by direct extension (i.e. simply getting bigger) and virtually never metastasise (spread via the blood or lymph channels). **Squamous cell carcinomas** often enlarge more quickly and can spread by local growth or metastasising. Together these two groups form 95% of all skin cancers.

The third type is the **melanoma**. The tumour is made up of malignant melanocytes and, although comprising less than five percent of skin cancers, is responsible for 75% of all deaths. The tumour spreads to distant organs and secondary tumours may develop when the primary pigmented lesion is still quite small.

Everyone should check their skin regularly and use the ABCD rule with any pigmented skin lesion:

- Asymmetry (variation in the shape or characteristics)
- Border (indistinct or ragged edges)

- Colour (variation in shade or intensity)
- Diameter (significant change in size, greater than 5 mm)

Any skin lesion which changes in any way (including pain or bleeding) should be shown to a doctor as a matter of urgency.

Sometimes the doctor will inspect a skin lesion and will provide reassurance that it is benign (harmless). However, he or she might also advise you to keep an eye on it and to return if the lesion changes.

An easy way to assess any changes in any skin blemish is to take a good photograph with a tape measure applied nearby so that the exact measurements of the lesion (along its longest axes) can be recorded.

NHS Choices publishes a mole self-assessment tool which can be accessed at:
<http://www.nhs.uk/Tools/Documents/Mole%20self%20assessment.htm>

The measure can be applied again after a few weeks or months and the results compared with the photograph to see if there have been any changes.

Sunburn can cause severe skin damage which may leave scarring and pigmentation after it has healed.

Depending on the Location, intensity of the sun and period of exposure, the typical skin changes, known to many, will appear. They include reddening and soreness of the skin,



which may be accompanied by blistering. The burned areas may be very sore or painful. Treatment for sunburn is to ease the pain and discomfort whilst the skin heals. The use of a cool flannel may help to cool the skin and moisturisers will help to keep it moist. If the sunburn is very severe, it may be necessary to consult your local chemist for advice.

During the recovery phase, the skin will peel



The skin underneath may appear slightly red but will look relatively normal.

It is important to protect the skin from the sun's rays to avoid sunburn using an appropriate sunscreen. Sunscreens protect against UVA and UVB rays. The sun protection factor (SPF)

should be at least 15 for protection against UVB and the higher the number the better. UVA protection is measured using a 1-5 star rating. The higher the number of stars the better the protection.

Sunscreen should be seen purely as a protection rather than as a way to enable someone to stay longer in the sun. Light-skinned people and those with lots of moles or freckles are more vulnerable because of the increased risk of skin cancer. They should try to stay in the shade and use clothing as well as sunscreen for protection. If sitting on a beach and using a sunscreen it is important to remember that swimming can wash off sunscreen and it is essential to reapply it after coming out of the water.

The sun is great and the brightness and warmth and all that goes with it can make us all feel better. However UV rays are the demon that lurks within it and can do so much cosmetic and physical damage. The sun should be enjoyed but everyone should remember the precautions to avoid it all ending in tears.

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