



Medicine for Managers

Dr Paul Lambden BSc MB BS BDS FDSRCS MRCS LRCP DRCOG FIHSCM

Here Comes The Sun

So sang the Beatles on their 1969 album, *Abbey Road*. We have certainly needed it this year. Everything seems better when it is sunny. It makes us feel and look healthier. It typifies energy, power and warmth. It gives life and enthusiasm. “Turn your face to the sun and the shadows fall behind you”. Yet amongst all this positivity, we should not forget that, from the medical perspective, it may not be as simple as that.

Repeated exposure to the sun or to tanning booths can result in the development of a range of problems over time. The sun can 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 Cancers

These are normally one of three types:

- **Basal Cell carcinoma**
- **Squamous cell carcinoma**
- **Melanoma**

Basal Cell cancers are usually slow-growing, enlarge by direct extension (i.e. simply getting bigger) and virtually never metastasise (spread by the blood or lymph channels).



They commonly occur on the head and neck because of their sun exposure. They start

as pearly white or pink bumps, or as a dark lump with a slightly translucent border on darker skin. Tiny blood vessels may be visible, particularly on pale skin and the bump may ulcerate, bleed and scab over.



It steadily enlarges if untreated, destroying tissue as it expands.

Squamous cell carcinomas often enlarge more quickly and can spread both by local growth and by metastasis.



They may be difficult to distinguish visually from basal cell carcinomas

and the diagnosis is made under the microscope when the tumour is excised or biopsied.

Together, these two groups of tumours form 95% of all skin cancers.

Melanoma is the third type of skin tumour and is made up of malignant melanocytes. It is associated with ultraviolet light and the use of sunbeds.



Melanomas are more common in people with multiple moles and sometimes, in the early stages they may be difficult to distinguish. The tumour may spread to distant organs and secondary tumours may develop when the primary pigmented lesion is still quite small.

Although comprising less than 5% of skin cancers, they are responsible for 75% of all deaths from skin cancer.

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

- **A**symmetry (variation in the shape or characteristics)
- **B**order (indistinct or ragged edges)
- **C**olour (variation in shade or intensity)
- **D**iameter (significant change in size, greater than 5 mm)

In addition 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 in any way**. 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**. 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

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.

Protection from Sunburn

It is important to protect the skin from the sun's rays by taking suitable precautions, including the use of an effective sunscreen

Obvious, self-evident measures include:

- Sitting in locations with shade
- Wearing clothing that covers the body and which, ideally is made of tightly woven fabric
- Wearing a wide-brimmed hat
- Protecting the eyes with sunglasses
- Avoiding going out during the hottest part of the day

A **sunscreen** should be used. Sunscreens protect against ultraviolet UVA and UVB rays. They are often referred to as broad spectrum sunscreens.

The **sun protection factor** (SPF should be at least **30** for protection against **UVB** and the higher the number the better. **UVA** protection is measured using a 1-5 star rating. A screen with a rating of at least **4** should be used.

Sunscreen should be treated purely as a **protection** rather than a way to enable someone to stay longer in the sun. It should be **reapplied** regularly and it is also important to remember that swimming can wash off sunscreen and it is essential to reapply it after coming out of the water.

People with light skin and with lots of moles should be even more fastidious in applying sunscreen because of their increased vulnerability to skin cancer.

The sun is wondrous, albeit rare in 2024, and its brightness and its warmth and everything that

can be associated with it make us all feel better and happy.

Galileo Galilei described its wonder;

“The Sun, with all those planets around it and dependent on it, can still ripen a bunch of grapes as if it had nothing else in the Universe to do”.

Perhaps for nhsManagers' amazing author and producer, a better quote might come from...

George Bernard Shaw; *“Whiskey is liquid sunshine”.*

However, ultraviolet rays are the demon that lurks within sunshine and can do so much cosmetic and physical damage.

The sun should be enjoyed but no-one should forget the essential precautions to avoid it all ending in tears.

Melanoma UK is a source of much valuable information about melanoma. It can be found:

www.melanomauk.org.uk

Tel 0808 171 2455

paullambden@compuserve.com