

Medicine for Managers

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Solar Keratosis

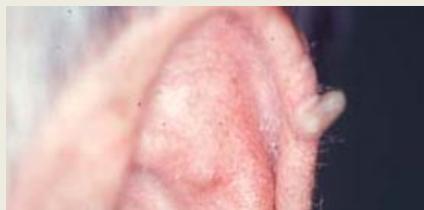
Christmas is over and, if the Secretary of State for Health is correct and NHS staff are overpaid and simply coasting through their work, then many should have plenty of time and money to consider a sun-drenched break in foreign climes to ease the stresses, drink in the glorious weather and simply to relax before having to start that coasting all over again in 2015.

For those of you who have missed the gaze of the Secretary of State, who are working hard and for whom medical care in all its aspects is a continual battle against time and inadequate resources, and who want to understand how medical disorders impact on management and care, let me explain about **solar** (also known as **actinic**) **keratoses**.

You will all have seen them because they are often present on the bald scalps of elderly men who have spent many summers in the sunshine without wearing a hat.

Solar keratosis is simply skin damage resulting from exposure to the sun over a prolonged period, usually many years. It is the ultraviolet rays in the spectrum which do the damage.

The keratoses usually appear raised and scaly,



dry and with the appearance of slightly yellow crusting. They are sometimes described as warty and may actually form a protruberance of dead skin called a **cutaneous horn** (see image).

They are of variable size and number and often appear in areas of skin which show other evidence of sun damage such as pigmentation, fissuring and chronic parchment-like changes.



They are to be found generally on the skin areas that are normally exposed; hence the face and forehead, scalp in bald people, neck, ears, forearms and the backs of the hands. In those sun-worshippers who spend long hours lying in the sun, similar changes will be observed in other over-exposed areas.

Under the microscope they may be very superficial or they may extend deeply in to the layers of skin. Once they have developed, some regress and disappear, some persist without developing further and some undergo malignant change to form squamous celled carcinomas.

The lesions are usually symptomless although very occasionally they may itch. They are normally noticed as an incidental finding by the clinician or because of cosmetic concern by the patient. The patients most likely to acquire such lesions, apart from the casual repeated sun-exposed, are those in employment doing such work as farming, industrial construction or other outside manual work. The patients usually are over the age of fifty and, over the age of seventy, one in three men and one in five women have at least one solar keratotic lesion. Like many other problems, the immunocompromised and those treated with chemotherapeutic agents are more vulnerable to solar changes.

Diagnosis is often made by simply examining the lesions which often have a typical appearance. Sometimes, when there is doubt about whether they are benign or not, a skin biopsy may be taken to distinguish solar keratosis from anything more sinister.

Treatment of solar keratoses varies according to the nature of the lesions. It is common for the doctor to advise no treatment, especially as at least a quarter of solar keratoses resolve spontaneously within a year. Normally people with such skin changes are advised to avoid the

sun and, if out to use a sun screen. Bald men should always wear a hat when the sun shines.

If treatment is required, it is possible to treat individual lesions with either solid carbon dioxide or liquid nitrogen. Both can destroy skin tissue but liquid nitrogen is more rapidly effective. Alternatively various skin creams and ointments are available: Commonly a cream called diclofenac (*Solaraze*®) is applied sparingly for three months. Alternatively fluorouracil (*Efudix*®) may be used for four weeks to destroy the abnormal cells. As an alternative salicylic acid ointment may be used either as a single treatment or as a pre-treatment for fluorouracil.

Generally solar keratoses are a measure of sun exposure and any patient with multiple lesions has an indicator for increased risk of squamous cell carcinoma or melanoma. Skin care and protection is vital and detailed discussion about the more hazardous skin lesions and how to suspect their presence is essential.

To avoid these keratoses, protection is the key word and the approach is simple; avoid the sun. Cover up, wear loose fitting capacious clothing and large hats with sun brims. Use sun screen whenever appropriate with a factor higher than SPF 30. Keep an eye on your skin and if you see anything strange, visit the GP for an assessment. If he is in any doubt, attend a dermatologist.

If you are going away, have a great holiday and don't give a thought to Hunt or the NHS. All the best.

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