

# Skin cancer: education should start young

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Although young children are unlikely to develop the malignant skin cancer called a melanoma, education about the dangers of exposure to ultraviolet rays from the sun cannot start too early. It is also possible that school staff who belong to the 'high-risk' group will learn something to their advantage by reading this article.

For several decades, there has been a craze to get out in the summer sun and develop a tan as soon as possible. Because of our poor climate this increasingly involves a two-week holiday abroad. For the lucky people who tan easily, without burning first, not a lot of harm may result from this, although I hasten to add that there is no such thing as a 'healthy tan' (this expression implying that ultraviolet radiation somehow benefits the skin). It is important to understand that *all ultraviolet radiation is damaging to the skin*, even in those who tan easily.

For most of us, however, the tanning process does not come very easily, and often involves burning in the early stages. It is this process of recurrent burning of the skin which is particularly injurious, and should be avoided at all costs. Why is this?

Chronic exposure to ultraviolet radiation, especially in those who burn easily, leads after several years to premature ageing of the skin, with wrinkling giving a leathery look to the skin. Blood vessels become more visible on exposed sites and premalignant lesions called solar keratoses start to develop. These are scaly spots, often measuring up to a centimetre across. In middle to later life various forms of skin cancer may develop, the two most frequent being known as basal

cell carcinomata (rodent ulcer) and squamous cell carcinomata. These growths are extremely common, but are usually fairly easily cured by various surgical procedures, or sometimes by freezing or radiotherapy. It is unusual for such skin cancers to be a threat to life, although of course the scars remaining from removal of these skin cancers may be cosmetically quite unpleasant.

The third type of skin cancer is called a melanoma (or malignant mole), and this variety is important for three reasons. Firstly, if it is not recognised early and treated promptly, it can spread internally and lead to premature death. Secondly, it tends to occur at an earlier age than the other forms of skin cancer, and thirdly, unlike the common forms of skin cancer where chronic exposure to ultraviolet radiation seems to be the main factor, it appears that a single severe spell of burning may be enough to precipitate malignant melanoma.

## The 'high-risk' groups

Malignant melanoma is a rare cancer, with only 2,600 new cases per year in the UK, but this rate is increasing rapidly and doubling every 10-15 years. It is thought that the major reason for this increased incidence is the increasing popularity of the package holiday, when people who

normally experience very little strong sun suddenly burn themselves during two weeks of exposure to very high-intensity ultraviolet radiation.

Who is likely to get malignant melanoma? It is more common in women than in men, and is most common in the 40-60 age group, although it can occur at any age. However, it is very rare in children. Malignant melanoma is commonest in fair-skinned individuals who go red and burn rather than tan. There also seems to be an increased risk of malignant melanoma developing in people who have multiple ordinary-looking moles, and they should avoid burning themselves through over-exposure to ultraviolet radiation.

In a study in Glasgow, it was found that while there was little or no delay in patients seeing consultants once they had seen their GP with a worrying mole, there often was a delay between the patient noticing a change on the skin and presenting themselves to the GP. It has been known for some years that if a malignant melanoma is diagnosed in its early stages it is virtually 100% curable, but that in the late stages more than 70% of patients may die from the cancer. It follows, therefore, that people need to be educated to look out for evidence of changing moles or new moles developing.

## Seven points to watch for

Most of us have several moles on our skin and these remain harmless all our lives. Many children and teenagers develop new moles, and it is extremely unusual for malignancy to develop at this stage. However, an adult should take any new mole (or a changing mole) seriously, and the family doctor should be consulted. There are seven points to watch out for:

1. *Does it itch?* An ordinary mole is not usually itchy or painful.
2. *Is it bigger than the blunt end of a pencil?* Most normal moles are smaller than this.
3. *Is it growing?* Normal moles in adults do not grow.
4. *Does it have a ragged outline?* Ordinary moles are a smooth, regular shape.
5. *Does it have a mixture of different shades of brown and black?* Ordinary

moles may be quite dark brown or black, but are all one shade.

6. *Is the mole inflamed, or with a reddish edge?* An ordinary mole is not inflamed.
7. *Is it bleeding, oozing, or crusting?* Ordinary moles do not do any of these things.

Such features on their own do not necessarily mean that a mole is malignant, and a malignant melanoma will usually have three or more of these features. However, any of these features should make one suspicious of melanoma, and a GP should be consulted to see if the case needs to be referred to a consultant.

To alert people to the risks of excessive sun exposure, and to make people more aware of the moles on their skin so that they will present themselves for examination earlier and at a curable stage, the Cancer Research Campaign has mounted a public education campaign in seven centres in the UK. People should learn to look at their skins, and the slogan of the campaign is *Be a mole watcher - for life*. In all the centres a pigmented lesion clinic has been set up to cope with the extra referrals, and patients are encouraged to report to their GP if they notice any worrying features in their moles. The GP will refer to the pigmented lesion clinic if indicated, and such patients are seen urgently.

## Prevention and precautions

What can people do to prevent skin cancer, and malignant melanoma in particular? First of all, it is important to identify the skin type:

- Type 1: Always burns, never tans. Very fair with red or blond hair and freckles.
- Type 2: Burns easily, tans minimally. Usually fair-skinned.
- Type 3: Sometimes burns, gradually tans.
- Type 4: Minimum burning, always tans. Usually white with medium pigmentation.
- Type 5: Very seldom burns, always tans. Medium to heavy pigmentation.
- Type 6: Never burns, but tans darkly. Blacks as well as others with heavy pigmentation.

Skin types 1 and 2 should not sunbathe at all, and should use a sunscreen with a protection factor of 15 or more if they need to be out in the sun for work, sport, or pastime. However, they should cover up as much as possible. Skin type 3 should use a factor 6-8. Skin type 4 should use a 4-6 protection factor; type 5 should use a 2-4 protection factor, and type 6 does not require a sunscreen. In skin types 3, 4, and 5, as tanning develops, the protection factor may be lowered, but remember that there is no such thing as 'safe tanning' — it is a question of relative risks and keeping them to a minimum.

To summarise:

1. Malignant melanoma and the more common forms of skin cancer can all be reduced considerably by cutting down the amount of exposure to ultraviolet radiation. Therefore...
2. Avoid burning as opposed to tanning.
3. Cover up if you are fair-skinned, and always use high-protection factor sunscreens.
4. Avoid sun during the middle of the day, and remember that the sun is stronger the nearer you are to the equator.
5. Malignant melanoma is rare, but it is important because it can spread internally early on and lead to death.
6. It is rare for an ordinary mole to become malignant, but watch out for new, growing, or changing moles and report promptly to a GP.
7. Caught early, malignant melanoma is curable by minor surgical operation.