

SOSS

Save Our Skin!

by Jeni Bone



Each year, over 374,000 Australians are diagnosed with non-melanoma skin cancers and almost 360 Australians die from the spread of these. Over 8800 Australians are diagnosed with melanoma, and almost 1000 people die. Perhaps due to a glorious outdoor lifestyle and some of the country's best golf courses, Queensland has the notorious distinction of being the melanoma capital of the world!

For women and men, skin cancers on the face are the most common, including the tip of the nose, around the eyelids, lower lip, ears and scalp.

According to Dr Dilip Gahankari, one of south-east Queensland's leading plastic and reconstructive surgeons, enhanced and localised exposure to these areas seems to be the reason. "It is not uncommon to see exaggerated skin damage on the right-hand side of the face in bus and truck drivers, or on the backs of hands and forearms in outdoor workers and sportspeople."

People of any age group and any skin color are susceptible to the skin cancer given enough UV radiation dose or sunburn. "The Caucasian skin of course is more susceptible," says Dr Dilip, adding

Another summer is coming to a close, but unlike many countries, we do not look forward to a bleak winter of very little sunlight. UV levels remain constant, even on cloudy days, and as bronzed Aussies we have the distinction of being a nation that leads the world in incidents of skin cancer.

that a single blistering skin burn in childhood more than doubles a person's risk of developing melanoma later in life. "It is frightening to know that in the past 20 years there has been more than a 100% increase in cases of pediatric (childhood) melanoma."

Although melanoma and the non-melanoma skin cancers are the most well-known consequences of sun exposure, the worst is skin damage and exaggerated ageing. It is now well-known from research so far that the actinic exposure (sun damage) causes structural skin damage in both dermal and epidermal layers of the skin in addition to the normal ageing process. These structural changes include degeneration of the collagen fibres in skin. The collagen fibres form a network that is responsible for maintaining the normal integrity of the skin. Replacement of these fibres by the degenerated tangled masses of collagen and elastic fibres (also called elastosis) cause increase in skin rhytids (creases). The actinically damaged skin thus shows little resistance to stretching. Actinic damage also causes degeneration in the normal blood vessels, which are irregularly placed and sparse. It also causes thinning and dilatation of skin veins. This accounts for the visible "veins" in the photo-damaged skin. The changes in the cell population in sun-damaged skin also reflect the chronic injury-causing inflammatory changes by the long-term U-V radiation exposure.

"Despite big budget ad campaigns and media coverage, we still see young and old crowding our beaches, sunbaking the whole day. Although the use of sunscreen is certainly more widespread, it is often not used in recommended quantity and dosage. People tend to use sunscreens as their main protection, but even the best sunscreens do not replace the precautions of staying out of particularly harsh sun between 10am and 4pm. They also be used in conjunction with broadrimmed hats, sunglasses and protective clothing.

"Unfortunately," continues Dr Dilip, "looking tanned is still a status symbol in our society, but a suntan is not an indicator of



good health. Physicians consider the skin's tanning a response to injury because it appears after UV rays have killed some cells and damaged others."

Dr Dilip states that it is a myth that "indoor tanning" is safe. "It is suggested by research that solariums can emit levels of UV radiation up to five times as strong as the summer midday sun," he says, referring to a report from Standards Australia, *Solaria for Cosmetic Purposes*. "They can certainly enhance the ageing and skin damage."

Contrary to common misconception, UV rays reach you on cloudy and hazy days, as well as on bright and sunny days. Protection from sun exposure is important all year round, not just during the summer or at the beach. UV rays can cause skin damage during any season or temperature.

"Any sunscreen with better than 15 SPF (sun protection factor) should do the job when applied in recommended quantity at recommended frequency," he says, recommending "at least two tablespoons of sunscreen be applied to entire body at least 20-30 minutes before going out and thereafter every two hours while in the sun."

But sunscreen should not be relied on as the only line of defense: broad-brimmed hats should be worn at all times in sun and UV-protecting eyewear is also a must, as UV rays are associated with various eye conditions, such as cataracts.

Fortunately most skin cancers do give warning signs, says Dr Dilip, but they are often difficult even for specialists to detect and require a high level of vigilance to ensure early detection. "Early actinic damage, often termed "sun-spots", can present on the face, usually around the cheek and eyes as crusty and scaly lesions that look red or brown patches. Often they hurt a little. Lower-lip lesions present themselves as fissures that heal, only to crack open in a few days."

Melanomas are the worst of the lot, especially because of their tendency to spread to lymph nodes and other organs via the bloodstream. These can be killer cancers. "The important thing to remember when checking, it's as simple as **ABCDE**."

- A** – Asymmetry – one half of the mole looking asymmetric to the other half
- B** – Border – Moles with border irregularity
- C** – Variegated colour of the mole, meaning lack of uniformity of colour and/or presence of multiple colours within the mole
- D** – Moles with diameter of more than 6mm should be treated with suspicion
- E** – Evolution – Moles with changing characters, such as

those changing colours, getting bigger or even smaller, becoming irregular, etc. should arise suspicion.

Once sun damage occurs, says Dr Dilip, there are treatments available to remedy wrinkles, spots, pigmentation and scars from mole removal. "These treatments include non-invasive skincare products as well as slightly more invasive options such as chemical peels, laser and dermabrasion. Such treatments act by bringing about controlled inflammation of the dermis with deposition and realignment of collagen fibres. Certain cosmetic injections, like Botox, are effective as a preventative measure for reducing wrinkle formation by causing controlled paralysis of certain hyperactive superficial facial muscles. There is evidence that continuous use of these injections does delay the look of ageing. The peels and dermabrasion basically achieve controlled removal of the outer layers of the skin and provide the fresh, new skin epidermis formation. Lasers can be effective in removal of pigmented spots and visible veins." ●

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