



I Know What You Did Last Summer

BY STEVEN H. DAYAN, MD, FACS

The seductive beauty of a tan is not only fleeting but also consequential. Despite widespread awareness of the harmful effects of excessive sun exposure it is nearly impossible for many to resist the temptation of an afternoon in the sun. While there are some medical benefits to limited sunlight exposure, too much is damaging. Unfortunately, by the time the hidden effects of the sun are recognized the branding marks have already been established. Facial skin subjected to sun overexposure enters an accelerated aging process. Irregular pigmentation, deep wrinkles and a worn leathery appearance rapidly set in. On a cellular level skin loses its orderly collagen and elastic fiber arrangement, and the epidermis thins. Melanocytes or pigment cells become unevenly distributed. Easily recognizable are the coarse creases into the lips, deep forehead furrows and crows feet of the eyes. However, a less obvious, but a more important concern, is the early appearance of pre-cancerous skin lesions (e.g. actinic keratosis). Fifteen percent of actinic keratosis can develop into skin cancers.



Not surprisingly, skin cancer, the most common cancer in the US, is on the rise. Early attention to sun damaged skin can prevent or reverse premature wrinkling and aging in addition to eradicating potentially cancerous skin blemishes.

The best method of avoiding sun overexposure is prevention. One extreme is to stay indoors during the summer months. A more realistic option is to avoid direct sunlight during the peak hours of 10A.M.-2P.M. If it is necessary to be outside for prolonged periods then a sunscreen should be mandatory. Many types of sunscreen are readily available. However, it is important to block both the UVA and UVB rays, both of which can cause damaging effects to the skin. A sunscreen with at least a 15 SPF rating is recommended. Certain product like zinc oxide provides a complete barrier to the sun's rays.

Regardless of age, everyone needs to be cognizant of the sun's effects. Younger individuals should not dismiss sun protection efforts. Current research is showing an earlier appearance of facial photoaging and skin cancer, especially in those who experienced blistering sun burns during their teenage years.

Today there are readily available treatment options for sundamaged skin. The anti-aging benefits of Retin-A™ have been recognized for over ten years. Used successfully, Retin-A™ can reduce the fine wrinkles, mottled hyperpigmentation, and roughness of facial skin. Kinerase™, a new topical cream, has recently been introduced to reverse photodamaged skin changes. Clinical trials comparing Kinerase™ to

Retin-A™(Renova™), revealed similar improvement in the Kinerase™ treated skin without the sunsensitizing or dehydrating effects common to Retin-A(Renova™). Aging skin not responding to conservative treatments may benefit from a chemical peel or microdermabrasion. Chemical peels are designed in three different strengths. Superficial peels (e.g. glycolic acid 30-50%) which can be done during a lunch hour, remove the upper layers of dead skin and can improve superficial wrinkles. The newest advancement in skin care, microdermabrasion works at the same level utilizing small crystals to abrade superficial damaged skin. However, to eradicate deep-seated pigmentary, collagen and elastic tissue irregularities an intermediate depth (e.g. TCA) or deep depth peel (e.g. phenol) is recommended.

The best proven treatment option for resurfacing moderate to severe sun damaged skin utilizes the **Carbon Dioxide laser**. The laser seals tiny capillaries and lymph vessels decreasing post treatment swelling. Additionally the laser can be programmed to reach a predictable depth.



Steven H. Dayan, MD, FACS
The Chicago Center for Facial Plastic Surgery
2900 N. Lake Shore Drive, Manor Building, Suite 430
Chicago, Illinois 60657

Regenerating skin is smoother, more uniform in color, more elastic and thicker. The collagen fibers actually tighten resulting in a mini-lift to the face. An added and very important benefit to laser resurfacing is the removal of pre-cancerous skin lesions (actinic keratosis). To maintain the healthy benefits of the regenerated skin patients should dedicate themselves to an extended skin care program. Seeking out the care of a physician and esthetician who work in tandem will allow for the best long-term treatment program.

It is never too early to treat sun damaged skin. Younger individuals can begin with daily creams, lotions and sunscreens. Those with advanced skin changes can expect improvement or reversal with chemical peels, microdermabrasion and laser resurfacing. Early prevention and treatment can avoid the unsightly sagging, wrinkles and mottled skin resulting from sun overexposure, in addition to identifying and preventing development of early skin cancers. Don't neglect your skin. If you have concerns consult with your physician. Sun damaged skin is too easily treatable to be ignored.