

Being Smart About the Sun

By *Jolene Andryk, M.D., F.A.C.S.*
Facial Plastic and Reconstructive Surgery

The importance of sun protection cannot be emphasized enough. Over 800,000 new cases of skin cancer are diagnosed each year. Most of these can be attributed to sun exposure.

Sun Exposure and Skin Damage

When our skin is exposed to the sun, it protects itself by producing more pigment or melanin, resulting in what we know as a tan, or sometimes a sunburn. What used to be mistaken for a “healthy look” is now known to be an indication of skin damage. Even without tanning, the daily, chronic exposure to the sun, especially in childhood, contributes to a significant amount of skin damage. Most of our skin damage occurs before the age of 18, well before the signs of aging such as wrinkles, broken blood vessels and “sun spots” appear on our skin. It is estimated that 90% of our skin’s aging is due to the damaging rays of the sun!

Both UV-B and UV-A rays contribute to changes in our skin. UV-B rays often peak in the summer, especially between the hours of 10 AM & 2 PM. They produce sunburns, but long term lead to skin cancers, liver spots, broken blood vessels and thick, coarse leathery skin. UV-A rays are present at all times of the day and year. These rays are used in tanning beds and give the same skin changes except contribute to yellow, sallow, saggy skin. Many new reports suggest they are even more harmful to your skin than natural sunlight.

It is important to remember these skin changes occur slowly over many years. People with a fair complexion who sunburn easily are most likely to develop a skin cancer and see skin damage from the sun. Our risk of skin cancer increases with more time in the sun. Basal cell carcinomas and squamous cell carcinomas are most common and result from being in the sun year after year without the use of sunscreen. Malignant melanoma is more rare, and can be more deadly. Three or more severe sunburns or a positive family history increase your risk of getting melanoma.

Sun Poisoning

Sun Poisoning is a term used to describe a num-



Jolene Andryk, M.D., F.A.C.S.

ber of sun-induced conditions. The most common is called solar urticaria which is characterized by hives induced by sun exposure. The hives are very itchy raised red bumps on the skin. Scratching can sometimes make these lesions worse. Urticaria is usually treated with antihistamines such as Benadryl tablets.

The second most common condition is called polymorphous light eruption. This is a skin rash that also consists of red, sometimes itchy, bumps on the skin in response to sun exposure. This usually happens (and is most severe) after a

person’s first sun exposure of the year (usually in early spring). After each subsequent sun exposure, the eruption becomes less severe and by the end of the summer it is usually not a problem. This condition is more common in females and can run in families. It is usually treated with topical steroid creams. Of course, the most important prevention for these conditions is use of a sunscreen.

Having Fun Wisely

How can we protect ourselves and still have fun? Remember, summer is not the only time we expose our skin to the sun! There are some helpful tips to protect our skin, avoid skin cancers and keep that youthful look:

- **Wear Sunscreen Year-Round**

Choose a broad spectrum sunscreen with both UV-B and UV-A protection. An SPF of 30 is recommended if you plan to be outdoors for long periods of time or during the midday. Otherwise, an SPF of 15 is good. Remember to apply it early, daily and reapply frequently. Most sunscreens require a minimum of 30 minutes on your skin before they start protecting against those UV-B rays. Continual use of a sunscreen, applied each morning and as needed, can keep your skin very healthy and youthful. By applying these rules, sunscreen should be put on all of our family’s faces each and every morning! Sunlight penetrates through clouds and



Being Smart About the Sun continued...

can injure our skin. Remember to replace sunscreen yearly as the sunscreen's properties can change with time.

- **Apply it Often**
Most sunscreen containers include directions to repeat application, after swimming, activity or after 4-6 hours.
- **Wear Protective Clothing and Hats**
Stay covered when possible with wide brimmed hats, beach umbrellas and protective clothing. Most clothing will offer protection, but a tighter weave of the fabric will offer more protection. For example, a white T-shirt has an SPF of about 8. Remember, do not rely on shade for protection. If you can see the sky, you can get burnt. Sunlight can reflect off of objects and penetrate deep into our skin.
- **Avoid the Sun During Peak Hours**
The sun's UV-B rays are most damaging between 10 AM and 4 PM. Try to limit time in the sun during these hours. Schedule activities early or late in the day when possible.
- **If Sunburn Occurs**
Treat minor sunburns with soothing baths and lotions. An aspirin or Motrin can help to relieve some of the warmth, redness and pain associated with a mild burn. If the sunburn is severe, seek treatment from a physician or dermatologist. Sometimes medication is necessary to reduce swelling, pain and potential infection.

Making Skin Screenings Part of Regular Check-Ups

While freckling and wrinkling are aesthetically undesirable, they are not the most serious of sun effects. Skin cancer, while often curable if detected early, can leave unpleasant scars. It's important to have your primary care physician or a dermatologist check your skin regularly for a dark or unevenly colored mole with irregular borders, usually larger than the diameter of a pencil eraser. It can be either flat or at times raised or eroded. These can be characteristic of a melanoma, a deadly form of skin cancer. Warning signs include changes in the appearance of a mole bleeding, pigment spreading and/or changes in

sensation around a mole. Skin lesions that do not heal are another warning sign.

Can Sun Damage be Reversed?

Yes! Remember, skin aging is a result of all of our years outside and in the sun. Good skin care products offered through a physician provide excellent cleansing, exfoliation, and hydration. They may soften fine lines and wrinkles, and improve skin texture and appearance. Some products which contain hydroquinone, a skin "bleaching" agent, may lighten freckles and sunspots. A skin care professional may also help you find a sunscreen that is right for you.

Microdermabrasion, or skin particle resurfacing, also helps to decrease the sun damage by softening fine lines and wrinkles, lightening pigment changes and improves the skin's texture and tone.

Fotofacial rejuvenation and ELOS, which uses radio frequency, or treatment of the skin with intense pulse light therapy, is a way to remove broken blood vessels and sunspots on the face with no downtime. In as little as five treatments, the skin's appearance is improved with softer, brighter skin. Pore size is also often improved.

For more improvement or **REMOVAL** of wrinkles, sunspots, and other sun related changes, a chemical peel or laser resurfacing can nearly reverse sun damage on the face. These more advanced procedures require a brief healing period, but the results are permanent, youthful appearing skin! Consultation with a facial cosmetic surgeon experienced in these techniques is recommended.

The most important step against skin damage and skin cancer is proper sun protection. Spend time outdoors wisely, apply sunscreen to all in your family before heading out in the sun and enjoy yourself!

For more information, contact The Facial Plastic Surgery Center, located at Advanced Healthcare's East Mequon Clinic (12203 N. Corporate Parkway, Mequon, 262-387-8202). Dr. Andryk also has office hours at the Menomonee Falls Clinic (N84 W16889 Menomonee Avenue, Menomonee Falls, 262-251-7500) and Mayfair Clinic (3289 N. Mayfair Road, Wauwatosa, 414-771-7900).

Dr. Andryk and her colleague at Advanced Healthcare are leading specialists in plastic and cosmetic surgery. Her colleague is:
Robert Whitfield, M.D.