

## Skin and Sun

Most people don't realize that the winter sun is as powerful as summer sun; its reflected rays from the snow are more intense than are those from sand. Even now, as winter approaches, sunscreens are essential for protection.

The skin is our largest and one of our most important organs, protecting us from environmental exposures and covering our bodies with a delicate, soft, pliable membrane. Because our skin is constantly regenerating, shedding, stretching and growing, it is an incredibly biologically active organ. But, when cells reproduce, there is always a potential for the reproductive machinery to malfunction. When the DNA of our skin cells becomes disturbed and abnormal, repeatedly reproducing this abnormality, we begin to notice the presence of a skin lesion. These lesions are worrisome when larger than a centimeter (or one half an inch), when irregular, when they bleed or when they are deeply or irregularly pigmented. Any one of these signs should trigger a visit to the doctor for a biopsy.

In the office or procedural room of the doctor's office, a small piece of the lesion is sent to the laboratory for a microscopic diagnosis. That procedure, known as a biopsy, gives your doctor the information needed to inform you of the next step. If the lesion is benign, usually no further treatment is required, but if the report indicates a cancer or the suspicion that a cancer is likely to develop in the lesion, a complete removal, or excision, is needed.

In this world of ever increasing skin cancers, physicians and epidemiologists need to determine the causes of this increase. Careful analysis of the data has rendered the expert opinion that we are all at greater risk because our atmosphere is not protecting us. As our ozone layer is depleted, the increased radiation that reaches our skin results in an exponentially increased incidence of skin cancers. The exposure to sunlight, a sunburn or severe sun sensitivity contributes to the incidence of skin cancer, but may take years for that injury to lead to a lesion. In recent studies, it was found that skin cancers may appear fifteen or more years after severe sun exposure.

Certain physical traits of freckling, difficulty tanning, light skin and hair color have been reported to increase the risk of developing one or more skin cancers. These patients tend to present with a greater number of lesions and more aggressive cancers. Particularly disturbing is the increased use of artificial radiation used in tanning salons. This radiation is known to increase the risk of skin cancers, particularly when combined with exposure to natural sunlight.

If you would like to prevent holes and flaps in the skin, that result from biopsies and excisions, please protect yourself and your children from the sun's damaging radiation by covering with sunglasses, hats, clothing and sunscreen. Remember that a sunscreen with a 30 block needs to be applied every two to three hours for maximum protection. Stay sun smart for safety!

### **ANNAPOLIS AESTHETIC SURGERY**

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