Detecting Skin Cancer

When I tell a patient he or she has a basal cell carcinoma, a common response is "Oh that's great news, I have the good kind of skin cancer!" Although, it is exceedingly rare for basal cell carcinoma to spread to other organs of the body (approximately a 0.0028% chance), depending on the subtype of basal cell carcinoma present, this tumor can be potentially very destructive to surrounding skin tissues. It is not always possible to predict by visual inspection, the depth and extent of involvement. Skin cancers on the nose, lips, ears, and near the eyes can be more aggressive.

Microscopic surgical removal (Moh's surgery) was used on this patient's nose. The basal cell carcinoma had spread extensively in the deeper tissue layers. This
resulted in a large surgical defect including removal of cartilage from the nose. In general, basal cell carcinoma is a slow growing tumor that invades locally. However, left untreated, basal cell carcinomas can invade muscle and bone.

Basal cell carcinoma is the most common cancer in humans. The estimated lifetime risk of basal cell carcinoma in the white population is approximately 40% for men and 30% for women. Seventy percent of basal cell carcinomas occur on the head, 25% on the trunk, and 5% in the genital areas. Ultraviolet (UV) radiation damage from the sun and radiation treatments are the main causes. UV radiation damages DNA in skin cells causing permanent mutations in genes called tumor suppressor genes that repair cell damage and keep our skin healthy.

Do not skip your ears when applying sunscreen to your face. Skin cancers that develop on the ear tend to be invasive. Since there is minimal subcutaneous tissue between the skin and the cartilage in the ear, removal of portions of the ear may be needed to excise the cancer.

Baseball caps are woefully inadequate in providing any photoprotection. You should wear a hat with at least a 3 1/2" brim circumferentially when outdoors.

Old Age versus Sun Damage

So many people have the misperception that skin with brown spots is due to aging. These dark brown spots are solar lentigines and are formed in response to UV damage. This is a photograph of a forearm that was chronically exposed to the sun.
This is a photograph of the upper arm, the underside aspect that was not exposed to the sun.

The skin is the same age (same arm on the same person) but the skin that was left unprotected from the sun has numerous brown spots. Skin that has this UV damage is at increased risk for a type of skin cancer called lentigo maligna melanoma.

**Clues you may have a basal cell or squamous cell carcinoma**
- A spot bleeds easily
- A spot does not heal or seems to be taking a long time to heal
- A spot looks like a scar but you do not recall any injury
- Any new bump especially in freckled skin or skin that has undergone multiple sunburns
- Persistent oozing or crusting
- A rough spot
- A rough spot that you keep picking off that continues to recur.

**STOP PICKING YOUR SKIN AND MAKE AN APPOINTMENT TO BE**
This condition was self-diagnosed as dry skin. Lotion did not clear up the problem but did make it feel a little smoother. If you look closely, you can appreciate that there are many rough raised scaly areas of skin. This is a typical appearance for precancerous growths called actinic keratoses. These develop into squamous cell carcinomas. There are effective topical medications that can be prescribed to treat this condition. Chemical peels and liquid nitrogen freezing can also be of benefit.
Squamous cell carcinoma

This red raised, scaling plaque appeared on the sun exposed surface of an arm. There was no pain, itching, bleeding, or any symptoms; this is typical of a skin cancer. If you wait for bleeding or pain to develop, the cancer may be at a more advanced stage. Squamous cell carcinomas have an overall risk of metastasis 2-5%.

Skin cancers have a variable appearance. Here is an example of a squamous cell carcinoma that appeared as a red bump.

Squamous cell carcinoma

There was no associated pain or soreness. The clue that is was suspicious for a skin cancer was that it was a NEW lesion.

This skin cancer is a little harder to recognize. The patient felt something different
on his back. The lighter colored area is a scar from prior surgery for a skin cancer years ago. The red areas were basal cell carcinoma, probably a recurrent skin cancer.

![Basal Cell Carcinoma](image)

**Prevention**

- Refer to Dr. Wong's last newsletter for anti-skin cancer diet tips, clothing tips, window treatments, etc. for skin cancer prevention.
- Sunscreen SPF > 30 every day
- Have Regular total body skin exams. If you have had a basal cell carcinoma, you have a 20-33% chance of developing another one within 1 year of being treated for your first skin cancer. There is a 45% chance of developing another basal cell carcinoma within 5 years.