Dr. Balin and Dr. Pratt perform a full body skin exam, from the tip of the toes to the scalp. The skin is the body's largest organ and sometimes a skin reaction can be indicative of an internal medical condition. Therefore, every inch of skin is thoroughly examined, and a complete medical history is taken. A full skin exam is required to ensure that you receive the best treatment and diagnosis possible.

#### TYPES OF LESIONS AND SKIN CANCERS

#### **Precancers/Actinic Keratosis**

Actinic keratosis is the most common type of precancerous lesion. Frequent exposure to the sun and tanning beds damages the skin, and therefore precancers develop. The greater the amount of exposure to UV rays, from a natural or artificial source, the greater the odds of developing one or more actinic keratoses. These types of lesions evidence themselves in older adults, but can be a result of sunburns when a child or adolescent. Individuals with fair skin, blonde or red hair and blue, green or gray eyes are more susceptible to the sun's damage and are at a greater risk of developing precancers.

An AK (actinic keratosis) is comprised of cancer cells, just like a cancerous tumor. However, AKs are labeled as pre-cancer because the cells have mutated, but not traveled from their original site. Undoubtedly, if these lesions are left untreated, they will develop into SCC, squamous cell carcinoma, a common form of skin cancer. In fact, many within the medical profession now believe that an AK is the beginning stage of SCC.

AK's can develop almost anywhere on the body; however, common locations include the lips, face, scalp, neck, back of hands, shoulders, forearms, and back because these areas are most often exposed to the sun. AK's most often look like small red scaly or crusty spots on the skin, although they can develop in multiple forms.

Symptoms of actinic keratosis may include the following:

- The lesion comes and goes
- It is dry and rough to the touch
- It is raw and sensitive
- It occasionally itches and causes a pricking/burning sensation
- It is inflamed and surrounded by redness
- Rare instances, occurrence of bleeding

Actinic Cheilitis is an aggressive form of AK. It develops on the lips and it too can turn into a squamous cell carcinoma and spread quickly throughout the body. Once AK's become a form of cancer and seep deeper into the skin, they may bleed, become infected, ulcerate and even spread to internal organs. The appearance of Actinic Cheilitis may include chapping, cracks and whitish coloring on the lips in addition to symptoms related with other AK's.

**TREATMENT:** At present, there are two treatment options for actinic keratoses. The first of which is freezing. In this circumstance, Dr. Balin applies liquid nitrogen until the lesion is destroyed. The second option is burning. In this treatment, Dr. Balin applies carbolic acid until the lesion is destroyed. With either method, continual observation by Dr. Balin after the remove is performed is necessary to insure that there is no recurrence of the lesion.

### Moles

Moles are normal, very common, small spots or growths on the skin. Often called "beauty marks," they appear or develop within the first few decades of life. Young adults may average about 25 moles on their bodies.

- **Shape:** asymmetrical; 1/2 of the mole looks different from the other
- **Border:** regular, sharp, and well defined
- **Color:** 1 or 2 shades of tan, brown, or skin color
- **Diameter:** normally less than 1/4 inch.
- Location: found mostly on sun-exposed areas of the body; face, back, chest, arms and legs.
- **Onset:** during early years of life: childhood through mid twenties
- Uniformity: resemble one another

**TREATMENT:** Moles do not need to be medically treated, but can be removed for cosmetic purposes. Also it is best to have a dermatologist keep all "normal moles" under observation to ensure no abnormalities arise within them.

## **Dysplastic Nevi**

Dysplastic nevi or atypical moles are unusual non-cancerous moles, which resemble melanoma and indicate an increased risk of developing a skin cancer. There are at least 20 million Caucasians within the United States that have dysplastic nevi. Half of their close relatives may also be affected by dysplastic nevi as medical reports indicate. There is a 50% chance of developing dysplastic nevi or melanoma if there are 2 or more close blood relatives that have been already affected by these conditions. Those with a lesser family history have a 6% chance of developing dysplastic nevi or melanoma. This percentage is great enough to warrant a self-examination and medical skin exams. And of course, sun protection is an important necessity.

- **Shape:** asymmetrical; 1/2 of the mole looks different from the other
- **Border:** irregular or hazy-fades into the skin
- Color: variation and irregularity with haphazard speckles of tan, brown, dark brown, black
- **Diameter:** 1/4 inch 1/3 inch or more larger than normal
- **Location:** the back, chest, abdomen, and extremities are the most common areas. They may also occur on unexposed areas such as the buttocks, groin, or female breasts.
- **Growth:** size change in a previously stable mole or appearance of a new mole after age 25 should raise suspicion.
- **Surface:** the center area of the mole may be flat or raised, at times with tiny 'pebbly' elevation.
- **Appearance:** varied greatly; different from one another
- **Number:** several to over 100 dysplastic nevi may be present. Numerous moles, despite color/type are a risk for melanoma.

**TREATMENT:** The usual course of action for a dysplastic nevus is excision. Dr. Balin surgically removes the entire abnormal mole, which prevents it from developing into a more life-threatening cancer.

### **Basal Cell Carcinoma**

This cancer is the most common form of skin cancer. It affects approximately 800,000 Americans each year. This cancer is caused by **chronic exposure to sunlight**. Anyone with a history of frequent sun bathing, extensive outdoor exposure, or multiple visits to the tanning booths are susceptible for developing this type of cancer. This disease is rarely seen in children, occasionally in teenagers, but mostly affects adults, however, skin specialists are reporting that they are seeing more and more cases of individuals in their 20's and 30's.

Following are the five most typical characteristics of basal cell carcinoma:

- Open Sore: bleeds, oozes, or crusts. A sore that remains open for more than 3 weeks. A persistent sore that appears to not heal is a very common sign of BCC.
- Reddish Patch: an irritated area frequently occurring on the shoulders, chest, legs or arms. The patch may crust, itch or burn. It also may persist with no indication of discomfort.
- Pink Growth: a slightly elevated rolled border with a crusted indentation in the center of the lesion. As the area grows, little blood vessels may appear on the surface.
- Shiny Bump: a nodule that appears pearly or translucent. Often times its color is pink, red or white and sometimes tan, brown or black. It can be confused with a mole.
- Scar-like Area: white, yellow or waxy. Often times has a poorly defined border. The skin appears shiny and taut but may indicate an aggressive tumor.

As one can tell from the above descriptions, basal cell carcinomas develop in a variety of appearances. For this reason it is essential that any new growth, which slightly resembles any form of BCC, must be examined by a dermatologist.

**TREATMENT:** Mohs Micrographic Surgery is highly recommended for treatment of BCC.

# **Squamous Cell Carcinoma**

This cancer is the second most common skin cancer affecting more than 100,000 Americans each year. It can occur on any part of the body including mucous membranes. However, the most common areas affected are those that are more exposed to the sun. If left untreated, this cancer eventually penetrates the underlying tissues of the skin.

Again, chronic exposure to the sunlight is the cause for most of the cases of skin cancer. It may also occur where the skin has suffered certain kinds of injury: scars, burns, long-standing sores, sites previously exposed to x-rays or certain chemicals, such as arsenic and petroleum by-products.

**TREATMENT:** Mohs Micrographic Surgery is highly recommended for treatment of SCC.

# **Malignant Melanoma**

This cancer arises from the pigment cells of the upper layer of the skin. They may also arise from similar cells that make up moles (nevi). This type of cancer sends down "roots" into deeper layers of the skin after a period of time, often months to years. Possible microscopic extensions of this cancer can spread or metastasize to vital organs of the body. Individuals with dysplastic nevi or a family history of dysplastic nevi have a higher risk of developing melanomas.

The number of individuals diagnosed with malignant melanoma continues to rapidly rise. Fortunately, melanoma can be one of the easiest tumors to cure, *if it is detected and removed early*. If the cancer metastasizes the prognosis can be very poor and may be fatal.

#### **Protection**

- Do not sunbathe
- Stay away from artificial tanning devices.
- Avoid unnecessary sun exposure, especially between the hours of 10am-4pm; peak hours for harmful UV radiation.
- Use sunscreens rated SPF 15 or higher when outdoors. Apply frequently.
- Always wear protective clothing such as long pants, long sleeved shirts, broad-brimmed hats and UV protective sunglasses when exposed to the sunlight.
- Teach your family, including children, good sun protection habits.
- Examine your skin or have it checked by your dermatologist, from head to toe at least once every 3 months.