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Key Inforbits

- Prevalence of Skin Cancer
- Types of Skin Cancer
- Risk Factors
- Prevention of Skin Cancer
- Photosensitivity and Medications

Available from: http://ivexsp.com/july-uv-safety-month/

Summer is finally here! Time to hit the pool and enjoy the beach. But as always, safety first. One of the dangers lurking in summer time fun is the sun. We love to spend time outside during the summer months, but it's also important to remind your patients to protect themselves. Read on to discover important counseling tips that you can use to help your patients prevent skin cancer, screen for possible malignancies, and educate on phototoxic drugs this summer and many more to come.

PREVALENCE OF SKIN CANCER:

- Skin cancer is one of the most prevalent types of cancer in America.[1]
- Currently, about 1 out of 5 Americans may develop skin cancer during their entire life. [2]
- Basal and squamous cell skin cancers account for the majority of skin cancers while only 1% of skin cancers are reported to be melanoma in the U.S.[3,4]
- There are an estimated 5.4 million cases of basal and squamous cell skin cancers diagnosed in the U.S. per year and it is estimated about 87,110 Americans will be diagnosed with melanoma in 2017.[3,4]

TYPES OF SKIN CANCER:

- **Basal and squamous cell carcinomas**
  - The most common types of skin cancer. [5]
  - They usually affect the sun-exposed parts of the body such as the face, head, and neck. [5]
  - Patch skin that appears on the affected area that can itch, bleed, and crust[6]
- **Melanomas**
  - The most dangerous types of skin cancer.[7]
  - Main cause is sunburn caused by strong and frequent UV exposure.[7]
  - They may start to appear on the chest, back, and leg, but any part of the body can be affected.[8]
  - Asymmetrical and dark moles usually appear on the affected parts of the skin.[7]

RISK FACTORS FOR SKIN CANCER *adapted from CDC*[9]**:**

- Physical Characteristics
  - Light skin color
  - Blue or green eyes
  - Blond, red, or even light brown hair[10]
  - A large number of or specific types of moles (irregular or large)[10]
  - Skin that burns or freckles easily with sun exposure
- Family/Personal History
  - Family or personal history of skin cancer
  - History of sunburns, particularly in childhood
  - Previous indoor tanning
  - Specific autoimmune diseases such as systemic lupus erythematosus[10]
  - Weakened immune system (HIV infection, medications that suppress immune system)[10]
  - Taking medications that increase light sensitivity[10]
- Exposure
  - Sun exposure through work or play
  - Work indoors during the week and have high sun exposure on weekends[10]
  - Spending time at high altitudes or tropical climates[10]

SKIN CANCER PREVENTION:

Sunscreen Selection

Who should wear sunscreen?

- EVERYONE should use sunscreen EVERY DAY they are outside (even if it is cloudy)!!! [11]

Three Qualities to Look for in Sunscreen Products:

- Water Resistant: effective for either 40 or 80 minutes while swimming or sweating
- Broad Spectrum: protect against both UVA and UVB rays
  - UVA – causes wrinkles, some skin cancers, long-term skin damage
  - UVB – causes damage to DNA of skin cells, sunburns and most skin cancers
- Sun Protection Factor (SPF) ≥ 30 [12]

Available from: https://laserloungeblog.wordpress.com/2013/07/10/protect-kids-from-skin-damage-with-the-right-sunscreen/

SUNSCREEN APPLICATION INSTRUCTIONS *adapted from Shedding Light*[12]**:**

- Apply 1-1.5 ounces (~ a palmful) to cover all exposed skin including face, neck, arms and legs
- Apply 15-30 minutes before sun exposure (doesn't work immediately)
- Reapply at least every 2 hours
  - More often, immediately after swimming or sweating
- Lip balm with SPF ≥ 30 should be used to protect lips

Available from: http://blog.mercydesmoines.org/sunscreen/

OTHER STRATEGIES TO REDUCE RISK OF SKIN CANCER[11,13]:

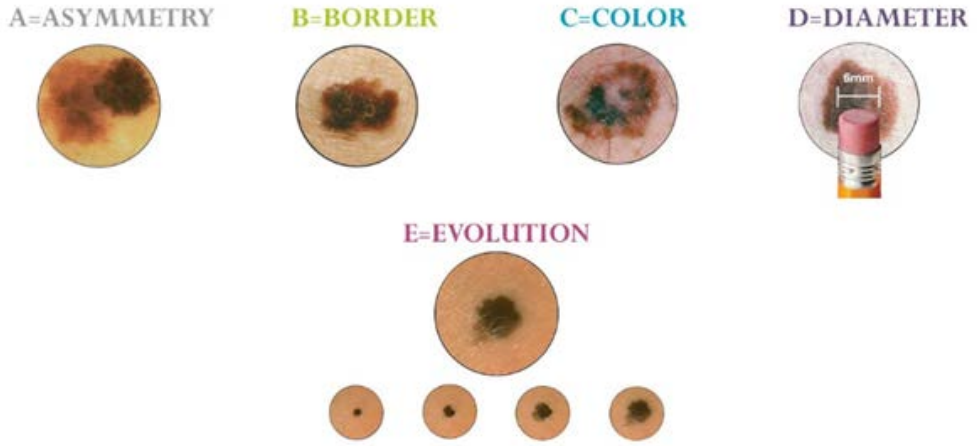
- Avoid exposure/seek shade (especially from 10 am-4 pm
- Wear protective clothing (e.g., long pants, long-sleeved shirt, hat with wide brim)
- Wear sunglasses to protect eyes

- Use extra caution near water, sand or snow (these reflect UV rays)
- Avoid tanning beds!!
- Get Vitamin D safely through supplements rather than sun exposure

Images from: https://ra.newlifeoutlook.com/side-effects-of-rheumatoid-arthritis-treatment/
Sunglasses image: http://www.bluemaize.net/sunglasses/kid-sunglasses

Skin Cancer Screening (ABCDEs of Melanoma)[14]:

Contact a dermatologist immediately if any moles or pigmented spots have any of the following:
A: Asymmetry – one half looks different from the other
B: Border – an irregular, blurred, or poorly defined border
C: Color – not uniform in color; may have shades of tan, brown or black, or could be white, red or blue
D: Diameter – size of pencil eraser (6 mm) or larger
E: Evolution – changes in size, shape, or color

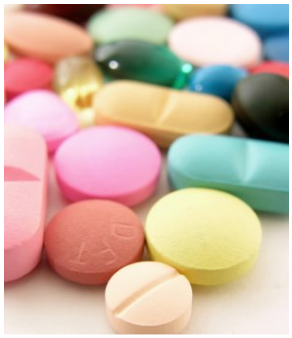


Available from: https://www.littleleaves.com/blogs/blog/melanoma-symptoms-and-detection

DRUG-INDUCED PHOTOSENSITIVITY:

Adapted from Handbook of Nonprescription Drugs 17th ed.[13]
A skin reaction involving an exaggerated sunburn with itching and possible urticaria can occur while taking certain medications and experiencing sun exposure concurrently.[13] It's important to limit time in the sun when taking the following select medications which can cause phototoxicity:

- Anticancer Drugs
  - Fluorouracil, Methotrexate
- Anticonvulsants
  - Carbamazepine, Gabapentin, Lamotrigine, Phenytoin
- Antidepressants
  - Bupropion, SSRIs, Trazodone, Venlafaxine
- Antihistamines
  - Cetirizine, Diphenhydramine



Available from: http://lymediseaseguide.net/lyme-disease-antibiotics-and-photosensitivity

- Antihypertensives
  - ACEIs, Calcium Channel Blockers, Hydralazine, etc.
- Anti-Infectives
  - Azithromycin, Azoles, Quinolones, Sulfonamides, Tetracyclines, Trimethoprim, etc.
- Antipsychotics
  - Haloperidol, Olanzapine, Ziprasidone
- Diuretics
  - Furosemide, Triamterene, Thiazide Diuretics, Amiloride, Acetazolamide, etc.
- NSAIDs
  - Celecoxib, Ibuprofen, Indomethacin, Naproxen, etc.
- Some Sunscreens (may produce a photoallergic reaction in adults)[15]
  - Aminobenzoic acid, Benzophenones, Cinnamates, Oxybenzone, etc.
- Others
  - Amiodarone, Benzoyl peroxide, Isotretinoin, Retinoids, Statins

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The Last Dose

"Develop success from failures. Discouragement and failure are two of the surest stepping stones to success."

~Dale Carnegie [American writer and lecturer, 1888-1955]

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