

CE Course Handout

The Mysterious Mole - Spotting These Spots Could Save Your Patient's Life!

Friday, June 10, 2016
2:30-5:30 p.m.

The Mysterious Mole - *Spotting* these *spots* could save your patients life!

Presented by:
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May 6, 2016

I am a dental professional....

“Oral” Cancer Screening: More than just an oral exam.

Healthy Mouth....Healthy Body

What have you noticed?

Skin

A waterproof, insulating shield that guards the body against temperature extremes, sunlight and chemicals.

Adults have about 8 pounds of skin, making it the body’s largest organ.

<http://science.nationalgeographic.com>

Keeping your skin healthy

- 1.) Avoid the sun
- 2.) Avoid the sun
- 3.) Wear wide-brimmed hat
- 4.) Use sunscreen *properly*
- 5.) Moisturizing

Skin Cancer

Skin cancer is the most common of all cancers.

It accounts for nearly half of all cancers in the United States.

Over 80,000 cases of skin cancer are diagnosed in Canada each year, more than 5,000 of which are melanoma, the mostly deadly form of skin cancer.

More than one million cases of non-melanoma skin cancer are found in the US each year.

More than 90% of all skin cancers are caused by UV radiation

One in five Americans will develop skin cancer during his or her lifetime.

Canadians born in the 1990s have two to three times higher lifetime risk of getting skin cancer (1 in 6) than those born in the 1960s (1 in 20).

Actinic Keratosis

An actinic keratosis, also known as a solar keratosis, is a scaly or crusty growth (lesion).

It most often appears on the bald scalp, face, ears, lips, backs of the hands and forearms, shoulders, neck or any other areas of the body frequently exposed to the sun.

You’ll most often see the plural, “keratoses,” because there is seldom just one.

Actinic keratosis is the most common precancer.

Affects more than 58 million Americans.⁶

Approximately 65 percent of all squamous cell carcinomas arise in lesions that previously were diagnosed as actinic keratoses.

In patients with a history of two or more skin cancers, 36 percent of basal cell carcinomas arise in lesions previously diagnosed as actinic keratoses.⁷

Actinic Keratosis Treatment Options

Topical Medications

Cryosurgery

Combination Therapies

Chemical Peeling

Laser Surgery

Basal Cell Carcinoma

The most common form of skin cancer, 2 million cases per year.

It occurs most frequently in men who spend a great deal of time outdoors and primarily produces lesions on the head and neck.

Basal cell carcinoma rarely spreads throughout the body but can invade neighboring bone and nerves.

While skin cancer can occur anywhere on the body, it most commonly occurs on sun-exposed areas such as the ears where sunscreen is often not applied at all.

Basal Cell Carcinoma

Your elbow is not the only safe thing to put in your ear anymore — try sunscreen.

People who have had one basal cell carcinoma are at risk for developing others over the years, either in the same area or elsewhere on the body.

<http://www.skincancer.org/basal-cell-carcinoma/> *The Skin Cancer Foundation Journal*, Vol. 25, 2007

The Five Warning Signs of Basal Cell Carcinoma (1)

An open sore that bleeds, oozes, or crusts and remains open for a few weeks only to heal up and then bleed again.

Drinking coffee reduces risk of basal cell skin cancer

Researcher Fengju Song, PhD, postdoctoral fellow in dermatology at Brigham and Women's Hospital and Harvard Medical School

Women who consume more than three cups of coffee per day, have a 20% lower risk of developing *basal cell carcinoma* than women who drink less than one cup a month.

Men who drank more than three cups of coffee have a 9% lower risk.

Caffeine appears to be the major factor in this because those that drink decaffeinated coffee did not see any impact in cancer risk.

Skin Cancer and Golfers

65% of melanoma cases are associated with exposure to ultraviolet (UV) radiation from the sun.¹

Men over age 40 have the highest annual exposure to UV radiation.²

The majority of people diagnosed with melanoma are white men over age 50.³

Melanoma is one of only three cancers with an increasing mortality rate for men.⁴

<http://www.skincancer.org/healthy-lifestyle/outdoor-activities/golf>

Squamous Cell Carcinoma

The second most common skin cancer.

More than 700,000 new cases of squamous cell carcinoma (SCC) are diagnosed every year.

It primarily affects people who sunburn easily, tan poorly, and have blue eyes and red or blonde hair.

Squamous cell carcinoma can metastasize if left untreated.

Most common in areas frequently exposed to the sun, such as the rim of the ear, lower lip, face, bald scalp, neck, hands, arms and legs.

Squamous cell carcinoma of the lip is 12 times more common among men than among women.

Squamous cell carcinomas

Squamous cell carcinomas typically appear as a persistent thick, rough, scaly patch that can bleed if bumped.

They often look like warts and sometimes appear as open sores with a raised border and a crusted surface over an elevated pebbly base.

Squamous cell carcinomas

An elevated growth with a central depression that occasionally bleeds.

Squamous cell carcinomas

An open sore that bleeds and crusts and persists for weeks.

A wart-like growth that crusts and occasionally bleeds.

Melanoma

Definition of melanoma: A form of cancer that begins in melanocytes (cells that make the pigment melanin).

It may begin in a mole (skin melanoma), but can also begin in other pigmented tissues, such as in the eye or in the intestines.

Iris Melanoma

Intraocular (or 'uveal') melanomas affect about one person in every 2500

Onjunctival melanomas affect one person in every 125,000.

Both tumors tend to affect adults.

The cause is unknown, although as with skin melanomas, ocular melanomas tend to be more common in individuals with fair skin, light-colored eyes, and a tendency to sunburn.

Eyelid Skin Cancers

Despite their small surface area, up to 10 percent of all skin cancers occur on the eyelids. Eyelid skin cancers can cause significant tissue damage and blindness, and can spread into the nasal and orbital cavities (the area behind the eye).

“Eyelid skin cancer is not something most people think about,” said C. William Hanke, MD, senior vice president of The Skin Cancer Foundation. “With their thin, delicate structures, they forget to protect from the sun.”

Most eyelid skin cancers occur on the lower lid, which receives the greatest amount of sun exposure. Approximately 90 percent of all eyelid cancers are basal cell carcinomas, while five percent or more are squamous cell carcinomas, and 1-2 percent are melanomas.

Melanoma Statistics

The rates of melanoma have been rising for at least 30 years.

In 2008 there were 62,480 new cases of melanoma and 8,420 deaths

In 2010 there were 120,000 new cases. Estimated 8,700 deaths in 2010.

in 2011 an estimated 123,590 new cases of melanoma were diagnosed in the US —with nearly 8,790 resulting in death.¹⁹

The American Cancer Society's estimates for melanoma in the United States for 2013:

About 76,690 new melanomas will be diagnosed (about 45,060 in men and 31,630 in women).

About 9,480 people are expected to die of melanoma (about 6,280 men and 3,200 women).

Melanoma Statistics

American Cancer Society's estimates for melanoma in the United States for 2014:

About 76,100 new melanomas will be diagnosed (about 43,890 in men and 32,210 in women).

About 9,710 people are expected to die of melanoma (about 6,470 men and 3,240 women).

It is estimated that in 2014:

6,500 Canadians will be diagnosed with melanoma.

1,050 Canadians will die from melanoma.

Melanoma is the third most common form of cancer in Canadian women between the ages of 15-29.

Serious?

This means that every eight minutes, someone in the United States will be given a melanoma diagnosis and that every hour someone will die from the disease.

Melanoma is the fastest growing cancer in the United States and worldwide.

Malignant Melanoma

The rarest form of skin cancer but is the most deadly.

It affects the cells which produce melanin and seems to be more prevalent among city-dwellers than among people who work out-of-doors.

It does not necessarily occur on sun-exposed areas of the body and is thought to be linked to brief, intense periods of sun exposure and a history of severe sunburn in childhood or adolescence.

Malignant melanoma metastasizes easily and is often fatal if not caught in time(2,5).

Melanoma accounts for less than five percent of skin cancer cases,²⁰ but it causes more than 75 percent of skin cancer deaths.²¹

Survival with melanoma increased from 49 percent (1950 - 1954) to 92 percent (1996 - 2003).²²

Melanoma is the fifth most common cancer for males and sixth most common for females, ages 20-29.²

Risk Factors for Melanoma

Family history of melanoma

Dysplastic nevi

Doctors refer to moles as nevi

History of melanoma

Weakened immune system

Many ordinary moles (50+)

Ultraviolet (UV) radiation

Severe, blistering sunburns

Freckles

Fair skin

Use of tanning beds before the age of 35

Scientists revealed Viagra promotes the growth of aggressive skin cancer

The drug, sildenafil which is marketed as Viagra and Revatio, is commonly prescribed to treat erectile dysfunction

Study found it stimulates a molecule that prompts existing tumors to grow

The study confirmed long-held beliefs that the drug raises skin cancer risk

It is important to remember that not everyone who has dysplastic nevi or other risk factors for melanoma gets the disease. In fact, most do not.

Also, about half the people who develop melanoma do not have dysplastic nevi, and they may not have any other known risk factor for the disease.

Overall, the lifetime risk of getting melanoma is about:

2% (1 in 50) for Caucasian

0.1% (1 in 1,000) for African Americans

0.5% (1 in 200) for Hispanics

The risk for each person can be affected by a number of different factors.

Bob Marley: What was dismissed as a soccer injury under his toenail turned out to be an aggressive form of melanoma that ultimately caused his death at 36.

Bob Marley died in 1981, officially due to malignant melanoma, a dangerous type of cancer that was found on his toe.

Reggae legend Bob Marley first discovered that something was wrong in 1977 when he injured his foot while playing soccer with some friends. The wound seemed pretty extreme for a simple soccer injury, and when it got worse instead of healing, he decided to see a doctor. Marley was diagnosed with melanoma, and an amputation of the toe was recommended.

Why didn't Bob Marley just have the amputation?

As a devout Rastafarian, Bob Marley adhered strongly to the tenets of his religion, which include a belief that amputation is sinful.

Skin cancer rates among Hispanics are skyrocketing in the US.

Widespread misconception that people with darker skin are not at risk of skin cancer, according to a recent survey by L'Oreal Paris.

New research shows that in the past two decades alone, melanoma incidence among Hispanics has risen almost 20 percent.

At this time, no one can explain why one person gets melanoma while another does not.

Research has shown that sun exposure, especially excessive exposure that leads to bad, blistering sunburns, is an important and avoidable risk factor.

Scientists are continuing their studies of risk factors for melanoma.

Melanoma is more than 10 times more common in whites than in African Americans.

It is slightly more common in males than in females.

Where to look?

Melanomas can occur anywhere on the skin.

The trunk (chest and back) is the most common site in men.

The legs are the most common site in women.

The neck and face are other common sites.

Anyone can develop this cancer on the palms of the hands, soles of the feet, and under the nails.

Moles

Moles are growths on the skin.

Doctors refer to moles as nevi (one mole is a nevus).

These growths occur when cells in the skin, called melanocytes, grow in a cluster with tissue surrounding them.

Moles are usually pink, tan, brown, or flesh-colored.

Melanocytes are also spread evenly throughout the skin and produce the pigment that gives skin its natural color.

When skin is exposed to the sun, melanocytes produce more pigment, causing the skin to tan, or darken.

Moles

Moles are very common.

Most people have between 10 and 40 moles.

A person may develop new moles from time to time, usually until about age 40.

Moles can be flat or raised.

They are usually round or oval and no larger than a pencil eraser.

Many moles begin as a small, flat spot and slowly become larger in diameter and raised.

Over many years, they may flatten again, become flesh-colored, and go away.

Melanoma Lurks in Larger Skin Lesions

In a new study published in the April 2008 issue of Archives of Dermatology, the NYU researchers confirm that an important warning sign of melanoma — moles that are larger than 6 millimeters, the size of a pencil eraser — is still valid.

In recent years, some researchers have argued that strict adherence to this guideline may make clinicians miss smaller melanomas.

ABCD Acronym

More than 20 years ago, NYU dermatologists developed a widely used rule, the ABCD acronym, for recognizing growths on the skin that could be early melanomas.

They recently added the letter E to the list.

The ABCD's of Moles & Melanomas

Asymmetry: Most moles are symmetrical and round. Be on the lookout for those that change shape and become asymmetrical.

Border: Most moles have even borders. Watch for moles that are uneven and irregular around the edges.

Color: It is normal for moles to be a uniform brown color. Moles that are different shades of brown or black may be a skin cancer and should be evaluated.

Diameter: Most moles are small -- about 6 mm or smaller in diameter. If a mole becomes larger than the tip of a pencil eraser, you should check with your dermatologist.

E for evolving lesions that change in size, color, shape or symptoms such as itching over time.

First Presentation of Two-Year Overall Survival Data for Opdivo® (nivolumab) in Combination with Yervoy® (ipilimumab) Showed Superior Efficacy Versus Yervoy Alone in Advanced Melanoma

More than a third of advanced-melanoma patients who received one of the new immunotherapy drugs in an early trial were alive five years after starting treatment — double the survival rate typical of the disease, according to a new study.

Use pet-safe sunscreens if possible. As of this writing, only one has FDA approval, and that is Epi-Pet Sun Protector. This is great news for dogs and horses, but unfortunately is not able to be used on cats.

94% OF VETERINARIAN DERMATOLOGISTS RECOMMEND THE USE OF SUNSCREEN ON PETS

866.204.0002

Vetbasix

Vetbasix Sunscreen SPF 15 is specially formulated for dogs and cats.

It contains titanium dioxide and zinc oxide to act as a barrier against the sun's harmful UV rays.

Bitrex is added to discourage the animal from licking off the cream.

Applying this cream liberally, 20 minutes prior to sun exposure will ensure your pet is protected from the elements.

Melanoma Education Foundation

I want to thank you for referencing www.skincheck.org in your wonderful article about melanoma. (RDHeVillage) I just want you to know that I am Dan's mom and also a dental hygienist. I, too, check my patients for suspicious growths and have referred many to their dermatologists with 2 being diagnosed with melanoma. I am proud to say that our educational program has been adopted by over 1150 middle and high schools nationwide. My husband Steve founded the Melanoma Education Foundation shortly after our son died so that no other parent would experience the grief of losing a child. Steve has also spoken at Yankee Dental in Boston and at several local dental hygiene components.

I wish you continued good health and thank you for promoting skin cancer awareness. It is only those of us who have experienced it firsthand who truly know how devastating a disease melanoma is.

Sincerely,

Gail Fine RDH, B.S
Peabody, MA.

Dermatology Visits

Total Body Photography

Total body photography is a one-off service that provides a set of 15 large high-resolution photo prints (8x12", A4-sized), and photo CD, that systematically covers the body.

They can be used by higher-risk patients for self-monitoring in between Skin Cancer Clinic visits, and are also brought along to your regular Skin Cancer Clinic appointments.

Dermatology Visits

Dermascope

Melanoma diagnosis via digital image processing.

The main components of dermascope are:

a magnifier

a light source

a transparent plate

Dermatology Visits

The scope is placed on skin coated with mineral oil, alcohol or a clear gel.

The instrument illuminates the skin at a low angle in all directions.

Photo of suspected lesion are taken.

Processed on a computer that grades the presence of various image characteristics and comes up with a total score that suggests potential melanoma.

Verisante Aura™

A revolutionary non-invasive Raman spectroscopy system designed to aid medical professionals in the detection of skin cancer.

The system provides valuable information by identifying spectral changes associated with the biochemistry of skin cancer cells in less than a second.

Scans can be accomplished quickly and accurately and can improve patient experience by helping avoid unnecessary biopsies.

Aura™ has the ability to dramatically speed up the diagnostic process and to have a remarkably high sensitivity to detect skin cancer.

An excellent way to assisting doctors in detecting skin cancer in its early, most easily treatable stages.

Jointly developed by the BC Cancer Agency and the University of British Columbia Faculty of Medicine, this patent protected technology has already been used in a human clinical study spanning six years on approximately 1,000 lesions. Reducing the number of unnecessary biopsies by 50%–100%.*

Researchers warn against apps to diagnose skin cancer

Melafind

The SolarScan

Prevention

Ultraviolet (UV) radiation from the sun and from sunlamps and tanning booths damages the skin and can lead to melanoma and other types of skin cancer.

Everyone, especially those who have dysplastic nevi or other risk factors, should try to reduce the risk of developing melanoma by protecting the skin from UV radiation.

Prevention

The intensity of UV radiation from the sun is greatest in the summer, particularly during midday hours.

A simple rule is to avoid the sun or protect your skin whenever your shadow is shorter than you are.

Ultraviolet Radiation

Rays that are part of the energy that comes from the sun.

UV radiation also comes from sun lamps and tanning beds.

UV radiation can damage the skin and cause melanoma and other types of skin cancer.

UV radiation that reaches the Earth's surface is made up of two types of rays, called UVA and UVB rays.

UVB rays are more likely than UVA rays to cause sunburn, but UVA rays pass deeper into the skin.

Scientists have long thought that UVB radiation can cause melanoma and other types of skin cancer.

They now think that UVA radiation also may add to skin damage that can lead to skin cancer and cause premature aging. For this reason, skin specialists recommend that people use sunscreens that reflect, absorb, or scatter both kinds of UV radiation.

In July 2009, the International Agency for Research on Cancer (IARC), a working group of the World Health Organization, added ultraviolet (UV) radiation-emitting tanning devices — tanning beds and lamps — to the list of the most dangerous forms of cancer-causing radiation.

It joins an assembly of hazardous substances including plutonium and certain types of radium, as well as radiation from the sun.

Some people visit tanning salons as an alternative to natural sunlight. Tanning beds in commercial salons emit mostly UVA light, not UVB. The beneficial effect for psoriasis is attributed primarily to UVB light. The American Academy of Dermatology, the FDA and the Centers for Disease Control and Prevention all discourage the use of tanning beds and sun lamps.

The ultraviolet radiation from these devices can damage the skin, cause premature aging and increase the risk of skin cancer.

Most practicing dermatologists discourage psoriasis patients from using tanning beds. However, some view this method as a last resort if patients do not have access to light therapy. Consult with your dermatologist before going to a tanning bed to treat your psoriasis.

The TRUTH about tanning beds

“Although many people believe they’re safe, the UVA rays that these machines emit cause and promote skin cancer.”

“UVB rays cause burning, but we now know that UVA rays penetrate deeper into the skin and cause even more damage.”

Joshua Fox, M.D., a dermatologist in NYC and a spokesperson for the American Academy of Dermatology

Tanning Beds

People 35 or younger who used the beds regularly had a melanoma risk eight-fold higher than people who never used tanning beds, and 2.5 times more likely to develop squamous cell carcinoma and 1.5 times more likely to develop basal cell carcinoma.

Even occasional use among that age group almost tripled the chances of developing melanoma.

"This is more information in support of the conclusion that tanning lights cause skin cancer," says Martin A. Weinstock, MD, professor of dermatology at Brown University and chair of the American Cancer Society's (ACS) skin cancer advisory board.

Base Tan Offers No Protection

Too often the tanning lights are used by people expecting more sun exposure in the near future, such as college students nearing spring break or summer recess.

"They may think that a 'base' tan will protect them from skin cancer, but in reality, the lights just act as a radiation multiplier, further increasing their skin cancer risk."

10% tanning tax July 1st 2010

Ultraviolet radiation (UVR) is a proven human carcinogen.³³ Currently tanning beds are regulated by the FDA as Class I medical devices, the same designation given elastic bandages and tongue depressors.³⁴ Frequent tanners using new high-pressure sunlamps may receive as much as 12 times the annual UVA dose compared to the dose they receive from sun exposure.³⁷

Ten minutes in a sunbed matches the cancer-causing effects of 10 minutes in the Mediterranean summer sun.³⁸

Another option may be to look for a salon that uses LED (light emitting diode) instead of UV dryers.

UV Nail Lamps

“It appears that exposure to UV Nail Lights is a risk factor for the development of skin cancer”. Dr.

Deborah MacFarlane, Director Mohs and DermaSurgery Unit at M.D. Anderson Cancer Center

60 Watts of power (nail lamps)

1,200 Watts of power (tanning beds)

2 cases of skin cancer to date

Sunscreen prior to manicure

Nail industry is investigating the issue, Doug Schoon, Nail Manufacturers Council, “This will prove false claims.”

dihydroxyacetone

According to the American Academy of Dermatology, the most effective sunless tanning products contain dihydroxyacetone (DHA) as the active ingredient.

DHA is a colorless chemical (it is derived from glycerin) that interacts with the amino acids in dead skin cells to produce a brown color change.

Since these dead skin cells are constantly being shed, the color change produced by DHA usually lasts about five to seven days.

The FDA states that commercial facilities should specifically protect clients from DHA exposure to the eyes, lips and mucous membranes as well as preventing the inhalation or ingestion of products containing DHA.

Toasted Skin Syndrome

While laptop computers (similar to heating pads or hot water bottles) rarely get hot enough to cause burns, the syndrome can cause the skin to darken and can, in rare cases, lead to skin cancers, said the Swiss researchers, Drs. Andreas Arnold and Peter Itin from University Hospital Basel.

Temperature underneath registered 125 degrees.

Adorned with 565 diamonds and a rare, colored diamond.

Sunscreen

Wear protective clothing, such as a hat and long sleeves.

Sunscreens may help prevent melanoma, especially those that reflect, absorb, and/or scatter both types of ultraviolet radiation. Sunscreens are rated in strength according to a sun protection factor (SPF).

The higher the SPF, the more sunburn protection is provided.

SPF value of 2 to 11 provide minimal protection.

SPF value of 12 to 29 provide moderate protection.

SPF of 30 or higher provide high protection against sunburn.

Sunglasses that have UV-absorbing lenses should also be worn. The label should specify that the lenses block at least 99 percent of UVA and UVB radiation.

Lotions / Sprays / Sticks?

All three have certain advantages that might make one a better fit for your skin type and lifestyle.

Lotions and creams tend to be more hydrating—good news for women who have dry skin.

Spray sunscreens score points for being super easy to apply. It's also a goop-free option for hairy skin areas (like the nape of your neck or your guy's chest). "Just be careful not to inhale it by spraying away from your nose," says Stein.

As for sticks, this relative newcomer to the market goes on dryer and won't run—perfect for around your eyes. Many are wax- or petroleum-based and less likely to wear off in water.

Chemical sunscreens contain special ingredients that act as filters and reduce ultraviolet radiation penetration to the skin. These sunscreens often are colorless and maintain a thin visible film on the skin. These sunscreens usually contain UVB absorbing chemicals and more recently contain UVA absorbers as well.

Physical Sunscreens, are products containing ingredients such a titanium dioxide and zinc oxide which physically block ultraviolet radiation (UVR). They provide broad protection against both UVB and UVA light.

Environmental Working Group

EWG's fourth annual Sunscreen Guide gives low marks to the current crop of sunscreen products, with a few notable exceptions. EWG researchers recommend only 39 – 8 percent – of 500 beach and sport sunscreens for this season.

The reason? A surge in exaggerated SPF claims above 50 and new disclosures about potentially hazardous ingredients, in particular recently developed government data linking the common sunscreen ingredient vitamin A to accelerated development of skin tumors and lesions.

Response to EWG

Dermatologist Dr. Zoe Draelos, a consulting professor at the Duke University School of Medicine and spokesperson for the American Academy of Dermatology, who also tests sunscreen products in her laboratory, applauds the EWG for looking at the safety and effectiveness of sunscreens, but feels the group is making unfair "sweeping generalizations."

"I think it's very sad," Draelos says. "A lot of their sunscreen recommendations are based on very old technology, and some of the best sunscreens on the market have newer chemicals that are much more effective. A lot of their opinions are not keeping pace with technology and an understanding of the science of these formulations. The nuances of sunscreens are very important."

The bottom line is they don't like manmade chemicals and would never recommend a product containing a chemical with "unknown" health effects. That's why you won't find sunscreens containing anything other than zinc and titanium, from brands such as Badger, California Baby, and Loving Naturals, on its list. Among its most hated: oxybenzone an ingredient common to many sunscreens that in some studies has been linked to cancer. But there's no consensus on that.

Oxybenzone

This results in an increased production of free radicals under illumination,^[5] possibly making this substance a photocarcinogen.^[citation needed] This study concludes that "determining what, if any, type of damage is done by ROS generated by UV filters needs to be explored."

The fact that researchers have not discovered how free radicals possibly caused by this sunscreen agent compare with the damage known to be caused by UV ray exposure makes prohibition of it questionable at this point.

Vitamin D

Don't seek the sun

Our bodies need vitamin D to build and maintain strong and healthy bodies.

Without vitamin D, the body cannot use calcium and phosphorus, two minerals that are necessary for healthy bones.¹

The American Academy of Dermatology does not recommend getting vitamin D from sun exposure (natural) or indoor tanning (artificial) because ultraviolet (UV) radiation from the sun and tanning beds can lead to the development of skin cancer.

Getting vitamin D from a healthy diet, which includes naturally enriched vitamin D foods, fortified foods and beverages, and/or vitamin supplements, and practicing sun protection offer healthier alternatives.

The D Dilemma

Controversy has raged among physicians and scientists about whether sun exposure is a beneficial source of vitamin D.

Some assert that certain Americans suffer from vitamin D deficiency, and that vitamin D produced in the body by solar ultraviolet (UV) exposure may help prevent prostate, colon, breast, and other cancers, as well as bone diseases.

Advocates of unprotected sun exposure, Drs. Wolpowitz and Gilchrest say there are "effective and almost effortless" noncarcinogenic alternatives-vitamin D-fortified foods and/or dietary supplements.

The D Dilemma

James Spencer, MD, clinical professor of dermatology, Mount Sinai School of Medicine, New York City, concurs. If you want more vitamin D, he says, you can obtain all you need from your diet.

"Drink vitamin D-fortified orange juice or milk or other enriched products.

Eat salmon and other fatty fish.

Take a daily multivitamin containing 600 units of vitamin D. It's so easy. And it's a lot safer than lying in the sun or climbing undressed into a tanning booth and frying your whole body."

Early Detection is KEY

Because melanoma usually begins on the surface of the skin, it often can be detected at an early stage with a total skin examination by a trained health care worker.

Checking the skin regularly for any signs of the disease increases the chance of finding melanoma early. A monthly skin self-exam is very important for people who have any of the known risk factors, but doing skin self-exams routinely is a good idea for everyone

Early Detection is KEY

If melanoma is not found early, the cancer cells can spread through the bloodstream and lymphatic system to form tumors in other parts of the body.

Melanoma is much harder to control when it has spread. The spread of cancer is called metastasis.
Abnormal ?

A doctor may want to watch a slightly abnormal mole closely to see whether it changes over time.
(Dentist / Hygienist ?)

Pictures taken at one visit may be compared with the appearance of the mole at the next visit. (Intra-oral camera ?)

Sometimes a doctor decides that a mole should be removed so that the tissue can be examined under a microscope. (Referral ?)

Biopsy

The removal of the entire mole or a sample of tissue for examination under a microscope is called a biopsy.

The biopsy, is usually done in the doctor's office using a local anesthetic. It generally takes only a few minutes. The patient may require stitches, and a small scar will remain after healing.

A pathologist examines the tissue under a microscope to see whether the melanocytes are normal, dysplastic, or cancerous.

The biopsy results in a diagnosis of melanoma can be cured by minimal surgery:

If the tumor is discovered when it is thin (before it has grown downward from the skin surface)

Before the cancer cells have begun to spread to other places in the body.

The information gathered from the staging process determines the stage of the disease.

Stages 0 - IV

Melanoma Oncology

Moves Internally Quickly

Staging has changed:

Stage 1 – Deep

Stage 2 – Lymph Nodes

Stage 3 – In blood to get to other organs

Tests

Local excision: Taking out the melanoma and some of the normal tissue around it.

Wide local excision: A surgical procedure to remove some of the normal tissue surrounding the area where melanoma was found, to check for cancer cells.

Lymphadenectomy (LIM-fa-deh-NEK-toh-mee) : A surgical procedure in which the lymph nodes are removed and examined to see whether they contain cancer.

Tests

Lymph node mapping and sentinel lymph node biopsy: Procedures in which a radioactive substance and/or blue dye is injected near the tumor.

The substance or dye flows through lymph ducts to the sentinel node (the first lymph node the cancer is likely to spread to from the tumor during surgery), or nodes. The surgeon removes only the nodes with the radioactive substance or dye.

A pathologist then checks the sentinel lymph nodes for cancer cells. If no cancer cells are detected, it may not be necessary to remove additional nodes.

Mohs Surgery

The procedure was developed in the 1930s by Dr. Frederic Mohs at the University of Wisconsin and is now practiced throughout the world.

Mohs surgery has been recognized as the skin cancer treatment with the highest reported cure rate for basal cell and squamous cell carcinomas.

UV Sanitizer

Philips Sonicare FlexCare comes packaged with a UV Sanitizer; the first integrated power toothbrush with a sanitizer.

The Sanitizer's UV Clean technology helps safeguard against up to 99 percent of certain germs found on brush head(s) clinically shown to reduce Streptococcus Mutans, E Coli and Herpes.

Patients have the choice to purchase FlexCare with the integrated UV Sanitizer or a stand-alone sanitizer that is compatible with other rechargeable power toothbrush heads.

Sonicare for Sensitivity

Sonicare has extra-soft, nylon bristles and an extra-wide sweeping motion, and it's clinically proven to be gentle yet effective at removing bacteria and keeping your mouth clean and healthy, even if your teeth are sensitive.

Brush heads are extremely important to the effectiveness of a Sonicare. The ADA and Philips Sonicare recommend brush head replacement every three months for optimal plaque removal results.

NEW Sensitive brush head

Gentle, Effective Cleaning

Our latest brush head innovation is designed for patients who have sensitive teeth or gums but still want the dynamic cleaning action of Sonicare.

Ultra-soft bristles at the core of the bristle field — 25% softer than our standard ProResults brush head

Bristles are trimmed in a domed shape, designed to apply less pressure on sensitive teeth and gums

Fits DiamondClean, FlexCare+, FlexCare, HealthyWhite and EasyClean

FDA-approved alcohol FREE CHX rinse.

ACP (Amorphous Calcium Phosphate) is a desensitizing agent, but needs CPP (Casein Phosphopeptide) to stabilize it.

Reverses lesion with subsurface remineralization. Fluoride works from the outside in, not just the superficial top layer.

MI Paste

For Xerostomia / High Caries Risk

Delicious BasicBites coat the teeth with a unique blend of vital and natural nutrients; excellent for patient compliance.

Designed for retention on tooth surfaces.

These nutrients were discovered to be present in healthy saliva and mimic saliva's supportive, natural benefits.

If you have dry mouth, it is critical to support your existing healthy oral pH

Delicious sugar free chocolate soft chews that can also be used as a sucking candy.

Supports a sustained and healthy pH on tooth surfaces while supplying a mineral source.

As an added benefit, excellent source of calcium.

Mimics saliva's natural defenses

Arginine is a common amino acid found in saliva and is naturally present in many foods.

On the surfaces of the teeth, arginine helps produce sustained base or alkali generation.

This sustained buffering helps support pH levels on tooth surfaces already in the normal range.

Debacterol

WHY SELF-EXAMS ARE SO IMPORTANT

If You Can Spot It You Can Stop It

Skin cancer is the most common of all cancers, afflicting more than a million Americans each year, a number that is rising rapidly.

It is also the easiest to cure, if diagnosed and treated early.

When allowed to progress, however, skin cancer can result in disfigurement and even death.

The Warning Signs

A skin growth that increases in size and appears pearly, translucent, tan, brown, black, or multicolored

A mole, birthmark, beauty mark, or any brown spot that:

changes color

increases in size or thickness

changes in texture

is irregular in outline

is bigger than 6mm or 1/4", the size of a pencil eraser

appears after age 21

A spot or sore that continues to itch, hurt, crust, scab, erode, or bleed

An open sore that does not heal within three weeks.

Oral Melanoma

Oral melanomas are uncommon, and, similar to their cutaneous counterparts, they are thought to arise primarily from melanocytes in the basal layer of the squamous mucosa.

Facial skin has the greatest number of melanocytes.

The oral mucosa is primarily involved in fewer than 1% of melanomas, and the most common locations are the palate and maxillary gingiva.

Metastatic melanoma most frequently affects the mandible, tongue, and buccal mucosa.

Oral Melanoma

In contrast to cutaneous melanomas, which are etiologically linked to sun exposure, risk factors for mucosal melanomas are unknown.

These melanomas have no apparent relationship to chemical, thermal, or physical events (eg, smoking; alcohol intake; poor oral hygiene; irritation from teeth, dentures, or other oral appliances) to which the oral mucosa constantly is exposed.

Although benign, intraoral melanocytic proliferations (nevi) occur and are potential sources of some oral melanomas; the sequence of events is poorly understood in the oral cavity.

Oral Melanoma

Clinicians must visually inspect the oral cavity, obtain good clinical histories, and be willing to perform a biopsy in any condition that is not readily diagnosed.

Patients with oral malignant melanoma often recall having an existing oral pigmentation months to years before diagnosis, and the condition may even have elicited prior comment from physicians or dentists.

AGE

Oral malignant melanoma is largely a disease of those older than 40 years, and it is rare in patients younger than 20 years.

The average patient age at diagnosis is 56 years.

Men aged 51-60 years.

Females aged 61-70 years.

A male predilection exists, with a male-to-female ratio of almost 2:1.

Oral Melanoma

Oral melanomas arise silently, with few symptoms until progression has occurred.

Most people do not inspect their oral cavity closely, and melanomas are allowed to progress until significant swelling, tooth mobility, or bleeding causes them to seek care.

Oral Cancer Facts

One American dies every hour from oral cancer

Survival rate has not changed significantly in over 40 years

Late detection: 70% of oral cancer lesions identified during visual exam alone are detected in stages III and IV

59% 5-year survival rate; poor quality of life

More than 25% of oral cancer victims don't use tobacco

Xylitol found in the fibers of many fruits and vegetables is a sugar alcohol sweetener used as a naturally occurring sugar substitute. Xylitol is specific in its inhibition of the mutans streptococci group, bacteria that are significant contributors to tooth decay.

Referral to a board certified oral and maxillofacial pathologist

Suspicious pigmented oral lesion should be referred to a board certified oral and maxillofacial pathologist.

The oral pathologist will decide if the lesion needs to be biopsied and will do so himself/herself or have an oral surgeon provide the biopsied tissue to the oral pathologist.

The oral pathologist will then process the tissue and examine its histopathology and render a final diagnosis.

The oral pathologist will also discuss future management of the lesion with the oral surgeon as well as being a source of communication with the patient's primary care physician.

OncoVEX

NEW VACCINE: A new vaccine is being tested around the country to treat advanced melanoma.

It's currently having very positive results and is in the third phase of the study.

In phase two, involving 50 patients with metastatic melanoma, eight recovered completely and four partially responded to the vaccine. The vaccine was initially developed to combat the herpes virus.

Researchers discovered accidentally that the vaccine attacked cancerous tissue when it was inadvertently placed in a Petri dish of tumor cells.

OncoVEX includes an oncolytic virus -- a reprogrammed virus that has been converted into a cancer-fighting agent that attacks cancer and leaves healthy cells alone.

“Prevention vs. Prosecution”

RDHmag.com (Vol. 28, ed. 10)

Failure to diagnose Oral Cancer is one of the top malpractice lawsuits, and is growing larger with the increase in oral cancer cases.

You may be surprised to learn who is at risk of lawsuit...