

Virtual Learning

Medical Interventions Skin Cancer April 13, 2020



Medical Interventions Lesson: April 13, 2020

Objective/Learning Target:

Describe the potential risk factors for skin cancer as well as the way to reduce the risk. (3.2.1/3.2.2)



Let's Get Started:

- Review the structures of the skin using the image to the right and take this <u>practice</u> <u>quiz</u> to see how much you can remember.
- 2. Recall; What are the 3 main functions of the skin?





Let's Get Started: Answers

- Review the structures of the skin using the image to the right and take this <u>practice</u> <u>quiz</u> to see how much you can remember.
- 2. Recall; What are the 3 main functions of the skin?
 - a. Sensation, regulation, and Protection (including from UV rays)





Background Information

Take notes on paper over the image below.

There are 3 main types of SKIN CANCER

Basal Cell Carcinoma (BCC)



Grows slowly over months or years. Look for small, round or flattened spots that are red, pale or pearly in colour. Some are scaly like a patch of eczema. May become ulcerated, bleed and fail to heal.

Squamous Cell Carcinoma (SCC)



Grows over months and may spread if not treated. Look for scaly red areas that may bleed easily, ulcers or non-healing sores that are often painful, especially when touched. Often found on lips, ears, scalp, backs of the hands and lower legs.

Melanoma

Accounts for 1-2 per cent of skin cancers. It is the most dangerous and aggressive form of skin cancer. If left untreated can spread to other parts of the body and can be fatal. Grows quickly over weeks to months and can occur amongst younger and older generations.

Can appear as a new or existing spot, freckle or mole that changes in colour, size or shape. Can grow anywhere on the body not just areas exposed to the sun. Occurs most frequently on the trunk in males and on the arms and legs in females.

Sometimes, melanoma can also appear as a lump, may have little or no brown pigment, as a reddish patch, or like a blood blister.

Use the ABCDE of melanoma detection to check for the following:



ASYMMETRY If the spot or lesion is divided in half the two halves are not a mirror image.



COLOUR A spot with a number of different colours through It.

set.

A spot that is growing and changing in diameter or size.

IAMETER

EVOLUTION A spot, mole or lesion that has changed size, colour or shape.

Image E provided by the Skin & Cancer Foundation Victoria



Background Information

Some risk factors are under our control and others are not. Risk factors for cancer can be grouped into four categories:

- 1. Behavioral risk factors are behaviors that you can change, such as smoking.
- 2. Environmental risk factors are toxins found in your surrounding environment that increase your cancer risk, such as radon and asbestos.
- 3. Biological risk factors are physical characteristics, such as gender, race, and age.
- 4. Genetic risk factors relate to genes inherited from your parents.



Copy the graphic organizer below on paper and use <u>this website</u> to determine the four risk factors for skin cancer.

Risk Factor Type	Increasing Risk	Decreasing Risk
Behavioral		
Environmental		
Biological		
Genetic		



Lesson Activity - Answers

Copy the graphic organizer below on paper and use <u>this website</u> to determine the four risk factors for skin cancer.

Risk Factor Type	Increasing Risk	Decreasing Risk
Behavioral	 Use of tanning beds/oils Lack of sunscreen use 	Using sunscreenAvoiding sun exposure
Environmental	 Exposure to UV radiation Exposure to harmful chemicals 	 Avoiding sun exposure during peak UV
Biological	 Lighter skin tone Weakened immune system 	Darker skin tone
Genetic	Family history of skin cancer	No family history



Practice

For each scenario, indicate whether it increases or decreases the risk of developing skin cancer and what type of risk factor it applies to.

- Sharon uses tanning oils when lounging by the pool. 1.
- 2. Tom completed a pedigree and determined his family has no history of skin cancer.
- Janet puts on sunscreen before going out for a day in the park. 3.
- Sam is a very pale man. 4.
- Robert was working with arsenic (a harmful chemical) and accidentally spilled 5. it on himself.



For each scenario, indicate whether it increases or decreases the risk of developing skin cancer and what type of risk factor it applies to.

- 1. Increasing; behavioral
- 2. Decreasing; genetic
- 3. Decreasing; behavioral
- 4. Increasing; biological
- 5. Increasing; environmental



Additional Practice

- 1. Check your understanding by taking this <u>online quiz</u> of skin cancer and risk factors.
- 2. Answer the questions found on this <u>worksheet</u> on skin cancer. (view the answers when finished <u>here</u>).



Additional Resources

- 1. Try out this <u>online game</u> to try and save the surfer with your skin cancer knowledge.
- 2. View this <u>research article</u> that discusses how the skin microbiome (i.e. bacteria on the skin) can either have protective or harmful roles in the development of cancer.