# Aging and your Skin







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### Your SKIN Interesting Facts

- Your skin is the largest organ in your body
- The average adult has approximately 21 square feet of **skin**, which weighs 9 lbs and contains more than 11 miles of blood vessels.
- The average person has about 300 million **skin** cells.
- It plays very important roles such as body temperature regulation and protecting you from the harsh outside environment
- Changes to your skin can reflect underlying health issues





# Topics to Review

**Skin Basics** 

What happens our skin as we age?

**Common Skin Conditions** 

Bumps, spots and more – Dangerous or not dangerous?

Tips and Tricks of how to keep your skin healthy

### The Layers of your Skin

- Epidermis
- Top and visible layer of your skin
- Determines the colour of your skin
- Protects your body from the outside environment
- Dermis
- Sweat glands, -makes the oil that keeps skin soft
- Where your hair grown
- Brings blood and nutrients to top layer
- Subcutaneous tissue
- Controls body temperature
- Provides a protective padding
- Serves as energy stores



### How your skin changes

- The functions of the skin decreases by as much as 50-60%
- All three layers of the skin become thinner
- There is less supporting structures between the layers of the skin and within the layers itself
- Impaired barrier function
- Skin becomes more fragile
- You start to see more expression lines in your skin





Facial Lines and wrinkles

- The wrinkles and deep facial lines presents as a results of changes to the deeper layers of the skin
- Changes in the middle layer of the skin results in less elasticity and moisture in the skin
- The loss of fat pads in the deep layer of the skin results in the sagging of the skin that we see with age

### Xerosis and dry itching of the skin

- Decrease production of protective lipid of oil producing glands
- Your skin becomes more dry
- Xerosis cracked fissures begin to show up in the skin which compromises it's barrier





# Bruising and Tears in the skin

- Loss of the support structures between our top two layers of skin causes easy bruising and tears
- A decrease in fat causes a thinning of the skin and reduced protection of blood vessels from external trauma
- blood vessels also becomes more fragile leading to more bruising and bleeding under the skin
  - For those taking blood thinners, it are means that you can bleed even more into your tissue space





### **Bed Sores**

- In some individual the loss of mobility puts them at risk for development of pressure sores and injuries
- These usually occur over a <u>bony</u> prominence as a result of usually long-term pressure, or pressure in combination with shear or friction.
- Because the skin is thinner and has a harder time healing, it means that these injuries can continue to break down if they aren't prevented and/or allowed to heal
- It is important to help those with mobility issue prevent these injuries by continually shifting their weight away from these areas at least every two hours



# Common conditions of the skin





- Melasma
- Rosacea
- Sebaceous Hyperplasia
- Age Spots





### Melasma

- Occurs predominantly in women
- Occur in middle age women it is chronic and recurrent
- Typically the face but can happen elsewhere on the body with age

#### **Common Causes**

- Genetics increases in melanin (pigment) production
- Hormones reproductive women melasma after oral contraceptive use, pregnancy, menopause, or hormonal replacement therapy

### Rosacea

- Common skin condition that causes redness and visible blood vessels in your face
- Sometimes there are small, red, pus filled bumps
- Usually appears after exposure to flares:
  - Hot drinks and spicy foods
  - Red wine and other alcoholic beverages
  - Temperature extremes
  - Emotions
- Risk factors
  - Female
  - Having light skin that is sun damaged
  - Smoking history





# Sebaceous Hyperplasia

- Enlargement of normal sebaceous glands
  - Occurs on the face, chest,
  - Small whitish-yellows bump 1-3 mm
- Due to changes in circulating male hormones as a person ages
- Benign growths
- Treatment
  - cryotherapy, laser, shave or surgical excision
  - Isotretonoin for patients that have a large extensive areas

### Age Spots (Solar Lentigines)

#### **Risk Factors**

- > 30 age
- Male sex
- Lighter skin individuals
- Increased sun exposure over a lifetime
- Other Environmental Factors
  - Air pollution
  - Tobacco Smoke

### Bumps, spots, and more – Dangerous or not dangerous?

- Xanthelasma
- Sebaceous Keratosis
- Skin cancers





## Xanthelasma

- Yellow, plaque-like grows around the eyelids
- Made of fatty cholesterol growths just beneath the skin
- Not associated with the amount of cholesterol (hypercholesterolemia)





## Sebaceous Keratosis

- Develop after the age of 50 yrs
- Look like well-circumscribed, round or oval lesions
- Has a typical stuck-on appearance
- Usually light brown, dark brown, or black
- Can sometimes get irritated, itch, cause pain and bleed

### Treatment

- Benign and not dangerous doesn't have to be treated
- Cryotherapy
- Curettage/Shave
- Electrodesiccation
- Surgical excision

### Skin Cancers

#### Causes:

- Due to a lifetime of sun exposure and sun damage
- Chronic Irritation
- Light coloured skin
- Genetics

#### Signs of skin cancer

- Bleeding or crusting
- Itching, pain and non-healing sores
- ABCDE of skin cancer
- Asymmetry
- Border irregularity
- Colour changes
- Diametre >5mm
- Evolution



# How to keep your skin young and healthy and safe

- 1. Protect your skin from the sun every day seek shade, use sun-protective clothing (i.e. long-sleeved shirt, widebrimmed hats, and sunglasses UV protection), and use sunblock (>SPF 30)
- 2. Don't get a tan Tanning prematurely ages your skin whether it is in a tanning bed or the beach in the sun, the harmful UV rays accelerate how quickly your skin ages.
- **3. Stop Smoking –** Smoking speeds up how quickly skin ages causing wrinkles and a dull, sallow complexion.
- **4. Avoid repetitive facial expressions –** repeatedly contracting the same muscles for many years can create lines which become permanent. Wear sunglasses to prevent squinting and creating lines
- 5. Eat a healthy, well-balanced diet fresh fruits and vegetables may help prevent damage that leads to premature skin aging as well as provide micronutrients that help with skin repair





- 6. Drink less alcohol alcohol dehydrates and damages the skin making us look older
- 7. Exercise Some studies show that moderate exercise can improve circulation and boost the immune system which may give the skin a more-youthful appearance.
- 8. Cleanse your skin gently scrubbing your skin clean can irritate your skin. Irritating your skin accelerates skin aging.
- **9.** Apply a moisturizer every day Moisturizer traps water in our skin, giving it a more youthful appearance.
- **10. Avoid skin care products that sting or burn** when your skin burns or stings, it means your skin is irritated. Irritating your skin can make it look older.
- 11. If you notice any skin changes or new spots that don't go away, don't delay! Be sure to talk to your doctor.