PREVENTING SKIN INJURY… AS WE AGE

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GROWING NEED FOR WOUND CARE

Aging population + Higher rates of diabetes + Chronic disease + Obesity

= Higher rates of chronic wounds
BY THE NUMBERS…

• Chronic wounds affect 6.5 million Americans/ year at a treatment cost of $25 billion per year
• Additional $39 billion in lost wages/ year
• $15.3 billion estimated expense on wound care products in 2010 (the cost of “success”)
TYPES OF WOUNDS

Venous ulcer
Pressure ulcer
Diabetic ulcer
Arterial ulcer
Vascular insufficiencies
Osteoradionecrosis
Delayed radiation tissue damage
Necrotizing infections
Chronic refractory osteomyelitis
Skin irritations
Surgical wounds
Neuropathic ulcer
LAYERS OF OUR SKIN

Epidermis:
- Stratum corneum
- Stratum lucidum
- Stratum granulosum
- Stratum spinosum
- Stratum basale

Dermis:
- Papillary
- Reticular

Subcutaneous fatty tissue:
- Sweat duct
- Nerve
- Capillary
- Sweat gland
- Vein
- Artery
SKIN LAYERS AND THE AGING PROCESS

- Outer layer of skin (epidermis) thins
- Melanocytes (cells that produce pigment) decrease, remaining melanocytes increase in size
- Collagen and elastin in dermis produced at slower rate, breakdown increased by long term sun exposure
  - Decrease in strength and elasticity
  - Elastosis – hallmark of photo-aged skin – leathery appearance
SKIN LAYERS AND THE AGING PROCESS

• Blood vessels of the dermis become more fragile – bruise more easily, angiomas
• Sebaceous glands produce less oil as you age (dermis)
  • Harder to keep skin moist
• Subcutaneous fat layer thins
  • Less insulation and padding
  • Increases your risk of skin injury and reduces your ability to maintain body temperature
  • Sagging skin
SKIN INJURIES/PROBLEMS

• Skin tears
  • Very common as we age...
• Forearms, legs
• Doors, chairs, canes, walkers, rose bushes, pets
SKIN INJURIES/PROBLEMS

• Skin tears: what to do?
• Depends on severity
• Keep moist, covered
• Call our wound center if needed
• Prevention
SKIN INJURIES/PROBLEMS

• Skin Tear Prevention
  • Keep skin hydrated – creams may work better than lotions
  • Keep body hydrated – drink adequate amounts of fluids
  • Protect skin in “risky” situations
    • SkinGuard, DermaSaver
SKIN INJURIES/PROBLEMS

• Non-cancerous lesions
• Brown spots, white spots, purple spots, red spots, “stuck-on” spots
NON CANCEROUS LESIONS
SKIN INJURIES/PROBLEMS

• Pre-cancerous lesions
  • Pre-cancers are common in older adults
  • Crusty, scaly spots also known as actinic keratosis (AKs)
  • Related to sun exposure
  • Most common on face, ears, hands, forearms, lips
  • Can lead to squamous cell skin cancer if untreated
  • Can be removed by dermatologist
ACTINIC KERATOSES
SKIN INJURIES/PROBLEMS

• Skin Cancers
  • Basal cell – slowest growing - least likely to spread
    • 80% of all skin cancer diagnoses in US
    • Usually occur in sun exposed areas
    • Pink or red, may have a pearly or waxy appearance
    • Open sore, may heal then reopen; bleeds easily
    • Sometimes looks like a non-cancerous lesion
    • When in doubt, check it out… with a trained professional
BASAL CELL SKIN CANCER
SKIN INJURIES/PROBLEMS

• Skin Cancers
  • Squamous cell carcinoma
    • 2\textsuperscript{nd} most common
    • Scaly, red, crusty, bleed easily; sometimes wart-like
    • Occur most frequently in sun exposed areas
    • Usually not fatal, but can spread if untreated; more likely to spread than BCC
SQUAMOUS CELL SKIN CANCER
SKIN INJURIES/PROBLEMS

• Skin Cancers
  • Melanoma – most aggressive
    • Needs early treatment. Once it spreads, difficult to treat and can be fatal
    • Kills about 10,000 people annually in US
    • Originate in melanocytes (pigment producing cells)
    • Usually look like moles, or develop from moles
    • ABCDEs of melanoma
A-B-C-D-E OF MELANOMA

• A: ASYMMETRY
A-B-C-D-E
OF MELANOMA

B: BORDER IS IRREGULAR

Regular border
Irregular border
A-B-C-D-E OF MELANOMA

- **C: COLOR**
  - MOST BENIGN MOLES ARE ONE COLOR
  - MULTIPLE COLORS = WARNING SIGN
A-B-C-D-E OF MELANOMA

- **D**: DIAMETER
  - BENIGN MOLES USUALLY SMALLER DIAMETER THAN MALIGNANT
  - LARGER THAN PENCIL ERASER (1/4 inch, 6 mm)
  - MAY BE SMALLER

**Good**
- Smaller than 6 mm

**Bad**
- Larger than 6 mm

(Have a doctor check it out)
A-B-C-D-E OF MELANOMA

- E: EVOLVING
- BENIGN MOLES SHOULD NOTE CHANGE
- TAKE NOTE OF YOUR MOLES
- MONITOR FOR CHANGES
SKIN CANCER PREVENTION

- Sunscreen, physical blockers
- Limit sun exposure between 10 am- 4 pm
- Annual skin check by dermatologist, or more frequent as needed
- Self-exams – watch for changing moles, spots
- When in doubt, seek medical advice
SKIN INJURIES/PROBLEMS

• Venous Disease
  • Problems with veins in legs
    • More common as we age
    • Causes swelling
    • Leads to slow healing
SKIN PROBLEMS/INJURIES

• Venous disease
  • See MD if you have swelling in legs
  • Some procedures available for problematic veins
  • May need to wear compression stockings
  • Maintain healthy weight – being overweight is risk factor
SKIN INJURIES/PROBLEMS

• Arterial disease
  • PAD = peripheral arterial disease
  • Increased chance of arterial blockages as we age
  • With decreased or poor blood flow, skin does not get adequate nutrients
  • Can lead to skin injury, poor wound healing, infection
  • Symptoms: shiny, pale skin, cool/cold temperature, slow nail and hair growth, discolored toes, pain
SKIN INJURIES/PROBLEMS

- PAD

- Maintain healthy weight
- Exercise
- Healthy diet – fruits, veggies, whole grains, ”good” fats
- Control diabetes
- See wound care MD if poorly healing ulcer
SKIN INJURIES/PROBLEMS

• Diabetes
  • Americans 65 and older: 25.2%, or approx 12.0 million seniors
  • 7th leading cause of death, but may be underreported
  • Leads to eye, kidney, arterial disease, neuropathy, poor wound healing
  • Skin does not heal well in the presence of high blood sugar
SKIN INJURIES/PROBLEMS

• Diabetes
  • Diabetic foot ulcers
    • Often related to neuropathy, arterial disease
  • Slow to heal
  • Leading cause of amputation in US
SKIN INJURIES/PROBLEMS

- Pressure Ulcers
  - Can occur due to extended pressure over bony prominences
- Weight loss -> Less fat padding
- Fat redistribution
- Illnesses can lead to decreased mobility, hospitalizations, surgeries
IMPROVE SKIN HEALTH

• Never too late to improve your (skin) health!!!

• Nutrition is KEY to prevention AND treatment
  • Adequate fluid – 8 cups (8 oz, non-caffeinated, non-alcoholic beverages)
  • Adequate calories
    • Maintain healthy body
IMPROVE SKIN HEALTH

- Enough protein, vitamins, minerals
  - Fruits, vegetables, protein
    - Vitamins A, C
  - May need supplement – Ensure, “protein shakes”, multivitamin supplement
IMPROVE SKIN HEALTH

• Check your activity: exercise if you can (and your doctor says OK)
  • Improves blood flow, nutrient delivery
• Check your skin – anything new??
• Check your feet daily if you are diabetic or have neuropathy
• Check in with your healthcare provider for regular screenings
THANK YOU!

QUESTIONS?