Lecture notes for Monday September 16, 2002

Outline

• Skin color
• Skin Cancer
• Accessory Organs
• Functions
• Wound Healing

Skin color

• Hemoglobin
• Carotene
• Melanin

Melanin

• Same # melanocytes; genetic variability in amount of melanin produced
• UV rays => increase melanin production => protects underlying cells
• Albinism

Skin Cancer

• Basal cell carcinoma
• Squamous cell carcinoma
• Malignant melanoma

ABC’s for detecting skin cancer

• Asymmetric
• Border irregularity
• Color
• Diameter
• Enlargement
Prevention
• Medications
• Monitor moles
• Regular skin checks
• Safe sunning
• Sun screen

Accessory Structures
• Hair:
  • Location: all skin surfaces except lips, palms, soles, nipples & external rep. Organs
  • Functions: protection & insulation

Skin glands
• Sebaceous glands
  —Secrete sebum into neck of hair follicle
  —Lubricates and inhibits bacterial growth
  —Acne

Sweat glands (table 5.4)
• Apocrine
  —Terminate in hair follicle
  —Viscous, odorous
  —Limited distribution
• Eccrine
  —Terminate on surface of epidermis
  —All over the body
  —Less viscous

• Ceruminous glans
  —Secrete ear wax
Homeostasis (see handout)

• Maintain core body temperature 37.2-37.6 °C
• Control center - hypothalamus
• Receptors
• Effectors

Burns

• 1st degree - epidermis
• 2nd degree - epidermis & papillae region
• 3rd degree - entire dermis – skin graft

Wound healing (see handout)

• Epidermal wound healing
• Deep wound healing