

Integumentary System Function, Assessment, and Therapeutic Measures

Chapter 53

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Normal Integumentary System Anatomy and Physiology

Epidermis,
Dermis, and
Hypodermis

Hair

Nails

Receptors

Glands

Blood Vessels

Epidermis

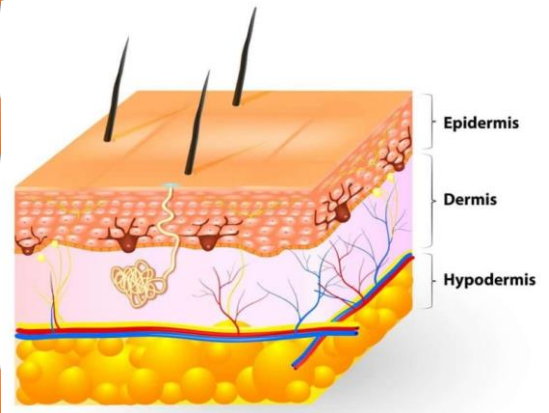
- Outermost layer
- No blood vessels

Dermis

- Inner deeper layer
- Abundance of blood vessels
- Sweat glands
- Sebaceous glands
- Nerve endings

Hypodermis

- Subcutaneous layer
- Cushions, insulates, and stores energy



Hair

Nails

Receptors

Glands

Blood vessels



Functions of The Skin

Protection

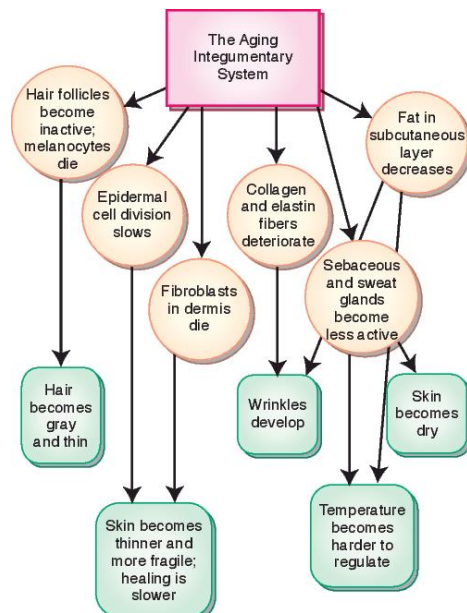
Synthesizes vitamin D with UV

Regulates body heat

Prevents unnecessary water loss

Sensory reception

Aging and the Integumentary System



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Nursing Assessment of the Integumentary System

Health History

Physical Examination

- Inspection
 - Color
 - Lesions
 - Moisture/Dryness
 - Edema
 - Vascular lesions
 - General integrity and cleanliness
- Palpation

Color

Pallor

Erythema

Jaundice

Cyanosis

Brown Coloring



Lesions

Primary

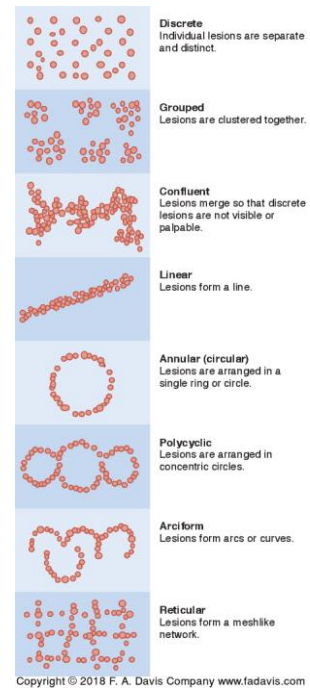
- Macule
- Papule
- Nodule
- Vesicle
- Bulla
- Pustule
- Wheal
- Plaque
- Cyst

Secondary

- Scale
- Crust
- Excoriation
- Fissure
- Ulcer
- Lichenification
- Scar

Configuration

- Discrete
- Grouped
- Confluent
- Linear
- Annular (circular)
- Polycyclic
- Arciform
- Reticular



Moisture/Dryness

- Dryness
- Moisture
- Scales
- Flakes



Edema

- Location
- Distribution
- Color
- Bilateral/Unilateral



Vascular Lesions

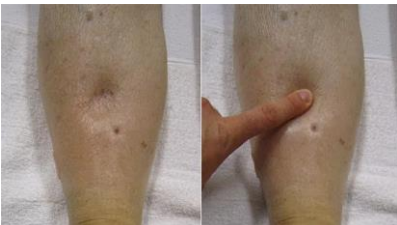
- Petechiae
 - Reddish purple spots smaller than 0.5 mm diameter
- Ecchymosis
 - Bruise
 - Blue black to greenish brown or yellow



General Integrity and Cleanliness



Palpation



Diagnostic Tests for the Integumentary System

Laboratory Tests

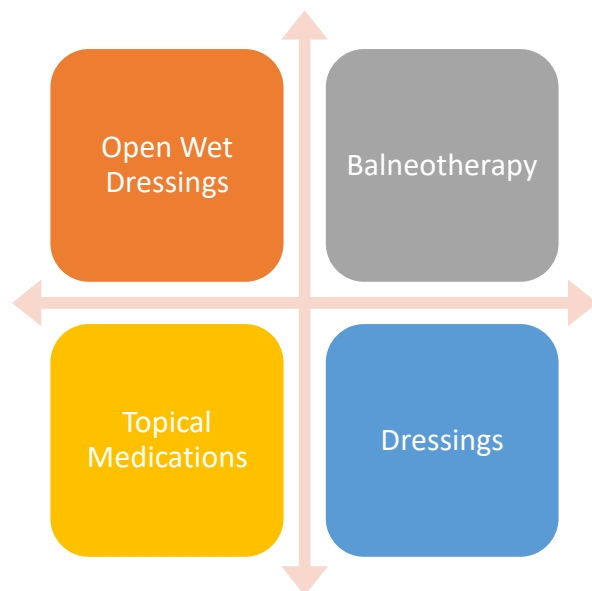
- Cultures

Skin Biopsy

Other Diagnostic

- Wood light examination
- Skin Testing

Therapeutic Measures for the Integumentary System



Nursing Diagnoses

- Impaired Skin Integrity
- Disturbed Body Image
- Self-Care Deficit



Skin Assessment

[Skin Assessment](#)

Primary Skin Lesions

_____ Macule

_____ Papule

_____ Vesicle

_____ Bulla

_____ Pustule

_____ Wheal

_____ Plaque

_____ Cyst

1. Vesicle or blister larger than 1 cm
2. Flat, nonpalpable change in skin color
3. Round, transient elevation of the skin caused by dermal edema and surrounding capillary dilation
4. Patch or solid, raised lesion on the skin or mucous membranes that is greater than 1 cm
5. Palpable, solid raised lesion
6. Small elevation of skin or vesicle or bulla that contains pus
7. Closed sac or pouch tumor that consists of semisolid, solid, or liquid material
8. Small raised area that contains serous fluid, less than 1 cm

Which of the following dressing types is most appropriate for the nurse to apply to a skin tear in an older adult client?

- A. Moist, sterile gauze
- B. Transparent dressing
- C. Paste
- D. Nonadherent dressing

Which of the following actions should the nurse take when new petechiae are observed on a client's skin?

- A. Cleanse the skin
- B. Apply cool compresses
- C. Inform the RN or physician
- D. Apply heat to the area