

DST-701 Integumentary Assessment: Adult

Nurses with Remote Nursing Certified Practice designation (RN(C)s) are able to manage the following skin conditions:

- Abscess and furuncle
- Cellulitis
- Impetigo
- Bites

ADULT INTEGUMENTARY ASSESSMENT

History of Present Illness and Review of System

General

- The following characteristics of each symptom should be elicited and explored:
 - Onset (sudden or gradual)
 - Location and spread
 - Duration, chronology
 - Quality/severity of symptoms
 - Associated symptoms
 - Precipitating and aggravating factors such as new skin or hair products
 - Relieving factors
 - Timing and frequency
 - Current situation (improving or deteriorating)
 - Previous diagnosis of similar episodes
 - Previous treatments and efficacy
 - Effects on daily activities

Cardinal Signs and Symptoms

- In addition to the general characteristics outlined above, characteristics of specific symptoms should be elicited as follows:

General

- Fever
- Malaise
- Arthralgia

Skin

- Changes in texture or colour
- Unusual dryness or moisture
- Itching, burning, pain or numbness
- Rash
- Bruises, petechiae
- Changes in pigmentation
- Lesions, blisters or crust
- Changes in moles or birthmarks

Hair

- Changes in amount, texture, distribution

Nails

- Changes in texture, structure

Medical History Specific to Integumentary System

- Allergies (medication, environmental, food)
- Allergic manifestation (photosensitivity, asthma, hay fever, urticaria, Stevens-Johnson Syndrome)
- Medications (over the counter, and prescriptions; tetracycline, steroids, oral contraceptives, antibiotics, anticoagulants, acetylsalicylic acid)
- Herbal preparations and complimentary therapies
- Immunization status (particularly tetanus and shingles)
- Communicable diseases: measles, chickenpox (varicella), herpes simplex
- Current skin complaint; detailed history
- **Diseases:**
 - Recent or current viral or bacterial illness
 - Known methicillin resistant staphylococcus aureus (MRSA) positive
 - Immunocompromised
 - Seborrheic dermatitis, contact dermatitis, psoriasis, eczema
 - Asthma
 - Diabetes, rheumatoid arthritis, thyroid disorder, collagen or vascular disorder
 - Skin cancer
- Current skin complaint; detailed history
- Sun exposure, tanning beds
- Surgeries or recent Botox, microdermabrasion, chemical peel
- Keloid formation

Family History Specific to Integumentary System

- Allergies (seasonal, food)
- Seborrheic dermatitis
- Psoriasis
- Skin cancer
- Atopic dermatitis
- Autoimmune disorders

Personal and Social History Specific to Integumentary System

- History of sensitive skin
- Obesity
- Hot or humid environment, poor environmental sanitation
- Use of hot tubs, swimming pools
- Tattoos and piercings
- Stress or emotional disturbance (may precipitate flares of chronic skin problem such as psoriasis)
- Exposure to new substances (soaps, foods, plants)
- Recent travel
- Others at home with similar symptoms
- Recent insect bite/sting
- Substance use

Physical Assessment of Integumentary System

Vital Signs

- Temperature
- Pulse

- Respiration
- SpO₂
- Blood Pressure

General Skin Assessment:

- Apparent state of health
- Appearance of comfort or distress
- Colour
- Nutritional status
- State of hydration, older adult at risk
- Hygiene
- Match between appearance and stated age

Inspection and Palpation of Skin

General Skin Examination

- Colour
- Temperature, texture, turgor, tenderness
- Dryness or moisture
- Scaling
- Pigmentation
- Vascularity (erythema, abnormal veins)
- Bruises, petechiae
- Edema
- Induration
- Skin folds
- Hair, nails, mucous membranes

Individual Lesions

- Colour
- Type
- Texture;
- General pattern of distribution
- Shape of single lesions, including the character of lesion edge (whether raised or flat)
- Joint involvement

Note: Examination of patients with darker skin colour requires awareness that pigmentation influences the colour of the lesion and how certain lesions manifest clinically.

Other Aspects

- Examine lymph nodes
- Examine area distal to enlarged lymph nodes

Major Types and Characteristics of Skin Lesions

- The major types and characteristics of skin lesions are presented in Tables 1 and 2
- Jaundice, spider angioma, palmar erythema or a necklace of telangiectases may indicate liver disease, particularly associated with alcohol or viral infection
- Petechiae or purpura may suggest a coagulation problem

Diagnostic Tests

The RN(C) may consider the following diagnostic tests to support clinical decision-making:

- Culture and sensitivity of weeping lesions
- Consider blood glucose and referral/consultation with physician or nurse practitioner if poorly healing wounds

Table 1: Major Types of Skin Lesions

Type of Lesions	Feature
Primary Lesion	Physical changes caused directly by the disease process
Atrophy (may be secondary)	<ul style="list-style-type: none"> • Skin thin and wrinkled
Macule and patches	<ul style="list-style-type: none"> • Flat, circumscribed, discoloured spot; size and shape variable (mole, port-wine stain), macules less than 1 cm in diameter, patches greater than 1 cm in diameter
Nodule	<ul style="list-style-type: none"> • Palpable, solid lesion that may or may not be elevated (e.g. keratinous cyst, small lipoma) greater than 1 cm in diameter
Papule	<ul style="list-style-type: none"> • Solid elevated lesion (e.g. wart, syphilitic lesion, pigmented mole) less than/equal to 1 cm in diameter
Petechiae, ecchymosis and purpura	<ul style="list-style-type: none"> • Extravasation of blood into skin causing non-blanching red macules and patches • Petechiae less than 2 mm in diameter, ecchymosis more than 2 mm in diameter • Purpura are groups of petechiae and/or ecchymosis that may be confluent, macular or raised
Plaque	<ul style="list-style-type: none"> • Well-defined plateau-like elevation compared to its height above the skin (psoriasis)
Pustule	<ul style="list-style-type: none"> • Superficial elevated lesion containing pus (e.g. acne, furuncle, carbuncle)
Telangiectasia	<ul style="list-style-type: none"> • Fine, often irregular red line produced by dilatation of a normally invisible capillary • Blanches with pressure
Ulcer (may be secondary)	<ul style="list-style-type: none"> • Loss of epidermis and at least part of the dermis
Vesicles and bullae	<ul style="list-style-type: none"> • Circumscribed, elevated lesions less than 5 mm in diameter containing clear fluid • Larger vesicles are classified as bullae or blisters (e.g. insect bite, sunburn)
Wheal	<ul style="list-style-type: none"> • Transient, irregularly shaped, elevated, indurated, changeable lesion caused by local edema (e.g. allergic reaction to a drug, a bite, sunlight)
Secondary Lesions	<ul style="list-style-type: none"> • May evolve from primary lesions, or caused by external sources such as trauma, infection, scratching
Crust	<ul style="list-style-type: none"> • Dry exudate
Erosion	<ul style="list-style-type: none"> • Loss of part or all of the epidermis
Excoriation	<ul style="list-style-type: none"> • Superficial linear or hollowed-out crusted area, caused by scratching, or picking
Exudative: Dry (crust or scab)	<ul style="list-style-type: none"> • Dried serum, blood or pus
Exudative: Wet (weeping)	<ul style="list-style-type: none"> • Draining serum, blood or pus
Lichenification	<ul style="list-style-type: none"> • Skin thickened, skin markings accentuated (atopic dermatitis)
Pigmentation changes	<ul style="list-style-type: none"> • Hyperpigmentation (increased skin pigment) • Hypopigmentation (decreased skin pigment) • Depigmentation (complete loss of skin pigment)

Scales	<ul style="list-style-type: none"> • Heaping-up of the horny epithelium (e.g. psoriasis, seborrheic dermatitis, fungal infection, chronic dermatitis)
Scar	<ul style="list-style-type: none"> • Various skin manifestations of healing process (e.g. keloid or acne cicatrisation)

Sources: Suneja, M., Szot, J.F. LeBlond, R.F. & Brown, D. D. (2020).

Wolff, K., Johnson, R., Saavedra, A.P. Roh, E.K. (2017).

Table 2: Major Arrangements of Skin Lesions

Arrangement of Lesions	Characteristics of Lesions
Annular	Arranged in a circular pattern
Confluent	Merge and run together
Discrete	Individual, separate and distinct: insect bites
Generalized	Scattered over the body: measles
Grouped	Clustered: herpes simplex
Linear or serpiginous	Forms a line or snakelike shape: poison ivy
Polycyclic	Concentric circles resembling a "bull's-eye": drug reactions, urticaria
Zosteriform	Linear arrangement along a nerve root: shingles

Sources: Estes, M. E. Z. (2014).

Suneja, M., Szot, J.F. LeBlond, R.F. & Brown, D. D. (2020).

Signs and Symptoms Requiring Referral or Consultation

- The first step is to differentiate a major skin eruption, infection or event from a minor one that can be managed by nurses with certified practice designation
- The following require consultation and/or referral to a physician or nurse practitioner:
 - Petechiae or widespread purpura
 - Unusual bruising
 - Palmer erythema
 - Spider angioma
 - Caput medusae
 - Jaundice
 - Butterfly rash
 - Skin presentation in the presence of systemic disease
 - Known or suspected MRSA
 - Any cellulitis covering or involving a joint
 - Suspicious pigmented lesions
- **Urgent referral/consultation:** Facial, periorbital and orbital cellulitis are particularly worrisome as they can lead to meningitis

DOCUMENTATION

- As per agency policy

REFERENCES

More recent editions of any of the items in the Reference List may have been published since this DST was published. If you have a newer version, please use it.

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