Skin Assessment: Performing

What is a Skin Assessment?
› Skin assessment is the procedure by which the condition of a patient’s skin is evaluated
• What: Skin assessment involves the examination of all areas of the skin for injury (e.g., pressure injuries), abnormal growths (e.g., melanoma and other skin cancers), inflammation or allergy (e.g., eczema or allergic reaction to an insect bite), and indicators of systemic disease (e.g., liver disease)
• How: No special equipment is needed except for a good lighting source; a measuring device and magnifying glass can be helpful. Skin assessment is a noninvasive procedure during which the clinician follows standard precautions (e.g., hand hygiene, donning of nonsterile gloves, proper disposal of used procedure materials) for infection control
• Where: Skin assessment is performed at the bedside, in a clinician’s office, or in the home setting
• Who: Skin assessment should be performed by a nurse, physician, or other professional with the appropriate training. Like other aspects of patient assessment, this responsibility cannot be delegated to assistive staff members, though such personnel can report to the healthcare team any concerns that might require clinical evaluation

What is the Desired Outcome of Skin Assessment?
› The desired outcome of skin assessment is to gain information about a patient’s skin condition. Skin assessments are performed
• to assess the extent and seriousness of an injury or ulcer
• to assess the effect of treatment for an injury or ulcer
• as part of diagnosing a systemic disease
• as part of an assessment of a patient’s hydration or nutritional status
• as part of an investigation of allergy
• to assess for insect bites or the presence of parasites

Why is Skin Assessment Important?
› Some inherited diseases are often first suspected based on a skin examination
› Melanoma and other skin cancers can be detected and treated
› Some infectious diseases, such as chickenpox or measles, and systemic conditions, such as liver disease or dehydration, have cutaneous manifestations

Facts and Figures
› The skin of older adults tends to be dry, inelastic, and thinner than that of younger people, and is more vulnerable to injury; 59–85% of older adults have dry skin (Hess, 2010)
› In the United States, pressure injuries develop in 0.4–38% of patients in acute care hospitals, 2–24% of residents of long-term care facilities, and up to 17% of patients in home care settings (Qaseem et al., 2015)
› More than 50% of the more than 275,000 persons in England diagnosed with cancer each year receive radiation therapy. Skin reactions are among the most common side effects of external beam radiation therapy (Bostock et al., 2016)
What You Need to Know Before Performing a Skin Assessment

Approximately one-third of the general population is affected by some type of skin disease or condition.

A complete head-to-toe skin assessment should occur at the time of patient admission to a healthcare facility. This initial assessment provides a baseline against which future assessment findings can be compared. During the course of hospitalization, the patient typically undergoes follow-up skin assessments once per nursing shift or as otherwise indicated in the facility/unit specific protocol.

The clinician performing a skin assessment should have knowledge of common types and causes of skin abnormalities that might be detected on assessment:

- There are two types of abnormally raised scars—hypertrophic and keloid. Keloid scars, unlike hypertrophic scars, extend beyond the margins of the original wound and do not regress spontaneously (for more information, see Quick Lesson About … Scars, Hypertrophic and Quick Lesson About … Keloids).

- Acanthosis nigricans is a thickening and hyperpigmentation of the skin on the posterior neck, axilla, or umbilicus. It is a risk factor for diabetes mellitus, type 2 in children and adolescents. It is associated with obesity and is a marker for hyperinsulinemia and glucose intolerance.

- Urinary incontinence can damage the skin due to maceration caused by constant dampness and irritation by ammonia and other substances in urine.

- Obese persons are at increased risk for skin injury compared to normal weight individuals, especially during hospitalization. Surgical incisions heal slowly because the blood supply to fatty tissue is poor. Skin folds are common sites of tissue breakdown. It is difficult to move obese patients without causing friction that can result in skin breakdown. For detailed information about transferring and repositioning obese patients, see Nursing Practice & Skill … Bariatric Patients: Transfer -- an Overview, Nursing Practice & Skill … Transfer of Patient: Using Assistive Devices.

Preliminary steps that should be performed before initiating a skin assessment include the following:

- Review facility/unit specific protocol for performing skin assessments, if one is available
- Review the treating clinician’s orders for skin assessment. Note any orders for skin moisturizers, creams, or lotions
- Review the patient’s medical history/medical record for
  – allergies (e.g., to latex, medications, or other substances); use alternative materials, as appropriate
  – the use of any medication
  – the presence of any illnesses that could contribute to skin conditions

Gather the following supplies:

- Nonsterile gloves; additional personal protective equipment (PPE; e.g., gown, face mask) can be necessary if exposure to body fluids is anticipated
- Facility-approved pain assessment tool
- Light source
- Measuring device
- Magnifying glass
- Written information, if available, to reinforce verbal education

How to Perform a Skin Assessment

Perform hand hygiene and don PPE, as appropriate.

Identify the patient according to facility protocol.

Establish privacy by closing the door to the patient’s room and/or drawing the curtain around the patient’s bed.

Introduce yourself to the patient and family member(s), if present; explain your clinical role; assess the coping ability of the patient/family and for knowledge deficits and anxiety regarding skin assessment.

Determine if the patient/family requires special considerations regarding communication (e.g., due to illiteracy, language barriers, or deafness); make arrangements to meet these needs if they are present.

- Follow facility protocols for using a professional certified medical interpreter, either in person or via phone, when a language barrier exists.

- Explain details of the skin assessment, including its purpose; answer any questions and provide emotional support as needed.

- As appropriate, ask family members and other visitors to leave the room during the skin assessment to promote patient privacy.

Assess the patient’s general health status, including his/her pain level using a facility-approved pain assessment tool.

Interview the patient/patient’s family to obtain information about...
• family history of skin abnormalities
• recent travel history
• recent exposure to animals or insects, and/or potential exposure to parasites
• patient’s history of bathing routines and products
• patient’s skin changes with the seasons
› Verify the presence of strong, natural lighting in the patient’s room, if possible, to avoid color distortion during the assessment
› Expose the skin area to be examined
› Assess one area, such as a leg, an arm, or the chest, replace the patient’s clothing in that area, then move on to assess skin on another part of his or her body; symmetrical comparison is important
› Inspect and palpate the area being examined. Use strong, natural light to avoid color distortion
› Observe skin color
• Look for jaundice in the patient’s sclera,
• Assess for erythema in pressure point areas, on the face, and in areas of trauma
• Note any pallor in the oral mucosa indicating anemia
› Use the backs of your hands to assess skin temperature and moistness
› Examine the mobility and turgor of the skin by pinching and releasing a fold of skin on the forearm, sternum, or under the clavicles to assess hydration status. If skinfold springs back into place, the patient is hydrated and if skinfold remains, this can indicate dehydration
› Press down firmly for 5 seconds over a site on the tibia or ankle to check for edema (i.e., soft tissue swelling due to accumulation of interstitial fluid); in any edematous site, check the presence and degree of pitting
• Absence of indentation following release of pressure is a normal response
• Grade the depth of an indentation or pitting using a facility-approved scale. An indentation of 2mm is typically graded as 1+, 4 mm is graded as 2+, 6 mm is 3+, and 8 mm is 4+
• Generalized (widespread) edema can result from heart failure, liver failure, or nephrotic syndrome and other kidney disorders
• Localized edema can result from deep vein thrombosis, infection, angioedema, or lymphatic obstruction
› Inspect for lesions or growths and palpate them; note their location, size, shape, distribution, elevation and color, and whether odor or exudate are present as this can indicate infection
• Lesions can be identified using the following terms:
  – Macules—small flat skin discolorations
  – Papules—elevated lesion less than 1 cm in diameter
  – Nodules—elevated lesion more than 1 cm in diameter
  – Plaque—flat-topped, elevated lesion
  – Vesicle—elevated lesion of more than 1 cm and filled with serous fluid
  – Pustule—elevated lesion of various size and filled with pus
› Note the color, texture, and distribution of hair on the patient’s skin and scalp
› Lift the hair on the patient’s head to inspect for scalp abnormalities or infestations (e.g., head lice)
› Note the color, shape, contour, smoothness, thickness, splitting, discoloration, and breaking of the patient’s nails. Note the attachment of the nails to the nail beds and observe for clubbing of nails (i.e., the angle base of the nails is greater than 180°)
› Assess nail beds, lips, and oral mucosa for cyanosis and note the capillary refill time in the nails
• A normal capillary refill time (i.e., ≤ 2 seconds) indicates adequate tissue perfusion
• Prolonged capillary refill time can be a sign of dehydration, hypothermia, peripheral vascular disease, or shock
› Assess the oral mucosa for moisture and evaluate the mouth and throat for lesions
› Discard used procedure materials and PPE; perform hand hygiene
› Update the patient’s plan of care, as appropriate, and document the following information in the patient’s medical record:
• Date and time of skin assessment
• Patient assessment findings, including skin color, temperature, texture, moisture level, and turgor, and any skin abnormalities detected on assessment
• Patient’s response to the skin assessment
• Any unexpected patient events or outcomes, interventions performed, and whether or not the treating clinician was notified
• All patient/family education, including topics presented, response to education provided/discussed, plan for follow-up education, and details regarding any barriers to communication and/or techniques that promoted successful communication
Other Tests, Treatments, or Procedures That May Be Necessary Before or After Skin Assessment

› Notify the treating clinician of any abnormalities found on skin assessment
› Prepare the patient for further assessment/diagnostic procedures
   • If malignancy is suspected, a biopsy will be performed
   • If burn or other injury is severe, skin grafting might be performed
   • Interventions to decrease identified risk factors for skin breakdown can be placed into an individualized skin safety plan
› Photography, per facility protocols, is commonly used to monitor wound healing and supports the written skin assessment documentation

What to Expect After Skin Assessment

› The patient will return to his or her pre-assessment level of activity
› Any skin abnormalities will be identified and properly managed

Red Flags

› Some patients feel physically ill in addition to having skin abnormalities. A rash combined with fever and malaise is of particular concern, as it can indicate meningitis
› Skin and mucous membrane dryness, reduced skin turgor, and slow capillary refill can indicate severe dehydration
› Pronounced yellow coloration of the skin can indicate jaundice, which is typically accompanied by yellow coloration of the sclera. Yellow skin coloration not accompanied by yellow sclera can be due instead to high dietary intake of beta-carotene
› Burns covering a large area of the patient’s skin increase his or her risk of dehydration, infection, and/or shock

What Do I Need to Tell the Patient/Patient’s Family?

› Explain the findings of the skin assessment to the patient or the patient’s family
› Any skin abnormalities will be identified and properly managed
› Discuss the importance of protection from the sun

References
