General Appearance, Skin and Body Measurements

Statement of Goals

A. Know how to observe and describe a patient's general appearance and skin.
B. Understand the importance of body measurements, followed over time.

Learning Objectives

A. Explain the clinical importance of careful observation and accurate description of a patient’s general appearance and skin.
B. List and explain attributes of patients that are assessed as part of general appearance. Demonstrate an accurate general description of a patient and be able to document it as part of the medical record.
C. Describe the anatomic layers of skin, the skin appendages, and the determinants of skin color.
D. Describe characteristics of skin that are assessed in clinical evaluation: color, moisture, temperature, texture, mobility and turgor. Demonstrate accurate description of skin characteristics.
E. Describe and demonstrate the evaluation of nails (color and shape) and hair (quantity, distribution and texture.)
F. Define terms commonly used to describe skin lesions. Apply those terms accurately to actual skin lesions.
G. Measure length/height, weight and head circumference in children. Document measurements on a growth chart. Explain the importance of serial measurements and percentile growth curves.
H. Measure adult height and weight. Explain the importance of following body measurements over time.
I. List usual biological changes of the aging process and how they affect physical findings for general appearance, skin and body measurements.
J. Define Body Mass Index (\(BMI = \frac{kg}{m^2}\)) as a measure of appropriate weight for height.

Student’s Preparation for the Unit

A. Reading Assignments:

Required:
Bates: pp 89-91 (Anatomy and Physiology); pp 103-105 (The General Survey); pp113 (Recording Findings) pp 121-123 (up to the Health History); pp 126-128, 130 (Techniques of Examination); pp 136-140, p144 (do not need to know specific examples or diagnoses, but be familiar with descriptive terms); pp 695-696, 745-747, 776 (Somatic Growth: Height, Weight, and Head Circumference); Skin pp 699-701, 841-842, 862
Curriculum Comments

Objectives A and B:

The following categories are attributes of a patient that you can begin to assess as soon as you see the patient. Careful observation of general appearance can help to guide the medical interview and physical examination, giving you clues about the medical problem. A careful and accurate description of the patient’s general appearance in the medical record provides a valuable comparison for future patient evaluations.

1. Level of consciousness
2. Signs of distress
3. Apparent state of health
4. Skin color and obvious lesions
5. Body build
6. Posture, motor activity and gait
7. Dress, grooming, personal hygiene
8. Odors (body or breath)
9. Facial expression

Examples of the documentation of general appearance are found in Bates, p. 19 and 113. Your documentation will vary based on the patient's physical exam findings.

Objectives C - F:

Bates covers the evaluation of skin, hair and nails. General appearance includes the skin color and obvious lesions. A more detailed skin evaluation is done as each region of the body is examined. The text defines a number of terms used to describe skin and skin lesions. Be able to define and use the following terms:

Optional:
Bates: pp 93-94 (Health History/ROS related to weight); pp 124-125 (Heath History and Health Promotion and Counseling); pp 132-135, 141-145, 148-151

B. Special Instructions: Your goal this year is to develop the skills of careful observation and accurate description. Over time, you will learn more about the clinical significance of your observations.
<table>
<thead>
<tr>
<th>Skin color:</th>
<th>Primary skin lesions:</th>
<th>Secondary skin lesions:</th>
<th>Miscellaneous Skin Lesions:</th>
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<tbody>
<tr>
<td>cyanosis</td>
<td>macule</td>
<td>erosion</td>
<td>lichenification</td>
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<td>jaundice</td>
<td>patch</td>
<td>ulcer</td>
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[Examples are shown in Bates, p. 135-140, 144-145. (Knowledge of specific conditions are not required.)]

The following websites have pictures of skin abnormalities:

Pictures below of other abnormalities:

**Cushing’s Disease**

**Asymmetry of Lower Extremities**
Nodules - Rheumatoid Arthritis

Nodules/Tumors - Neurofibromatosis
Eroded Vesicles resulting from Atopic Dermatitis

Ulcer
Objective G:

In the first two years of life, head circumference should be measured at every well child visit. Thereafter, it should be measured if there is concern about the growth of the head or head size.

Objective I:

General appearance, including skin in older adults:

The epidermis, hair follicles and sweat glands undergo atrophy, so skin may be thinner, lax and wrinkled. Dry skin is common. There may be purplish macules (actinic purpura) on hands and forearms due to leakage of blood from capillaries. Nails may be thickened, especially on the toes. Many common skin conditions in the elderly are related to sun exposure, such as actinic lentigines ("liver spots") and actinic keratoses.

Hair will be grayer and thinner. Graying is due to a decrease in the number and function of hair follicle melanocytes. Most premature graying is attributed to a benign autosomal dominant trait, but may occasionally have other causes, such as Vitamin B12 deficiency. Many men have a genetic predisposition to temporal balding with age. Pubic, axillary, and extremity hair tends to decrease. Women have increased facial hair, due to decreased estrogen. When estimating a patient's age, note that Caucasians tend to have wrinkles and gray hair at a younger age than other racial groups.

Body Measurements in older adults:
Height will decrease somewhat, due to thinning of the intervertebral discs. Additional loss of height may be caused by posture (flexion of the hips and knees) and by disease
(osteoporotic changes in the vertebral bodies.) Weight often increases with age, but should remain constant if caloric intake and activity are balanced.

Objective J:

Body Mass Index (BMI) is a useful single measure of weight in relation to height. It is often calculated in clinical settings, and is used in clinical research. In 1998 the National Heart Lung and Blood Institute (NHLBI) issued new guidelines defining obesity. The guidelines use BMI and are consistent with international standards. They define overweight as a person with a BMI >25. Obesity is defined as BMI >30. Under the new guidelines it is estimated that 55% of Americans are overweight or obese. These adults are at increased risk of hypertension, diabetes, coronary heart disease, stroke, some cancers and osteo-arthritis among other illnesses. Obesity is thought to be the second leading cause of preventable death in the US. The risk of illness from being overweight is not equal for all persons with BMI >25. Other factors, such as waist to hip ratio, blood pressure, lipid profile and family history also play a role.

Apply Your Skills

Observe and perform measurements of height and weight at your preceptor’s office. Calculate or determine Body Mass Index (BMI), based on chart in Bates, p. 91. If children under 2 years of age are cared for there, include head circumference; plot your results on a growth chart.

Observe the general appearance of several patients who come to the office. Discuss your observations with your preceptor. Observe the skin, nails and hair of patients you see. Try to apply the terminology that you are learning to your observations.

Include body measurements, general appearance and skin, on this week’s patient encounter note.

Web References


The CDC website, www.cdc.gov/growthcharts/ provides access to growth charts as PDF files.
**General Appearance, Skin and Body Measurements Checklist**

|☐| Appropriate draping for all aspects of the exam |
|☐| Appropriate guidance given to the patient throughout the exam |
|☐| Observe the patient’s general appearance |
|☐| Level of consciousness |
|☐| Signs of distress |
|☐| Apparent state of health |
|☐| Skin color and obvious lesions |
|☐| Body build |
|☐| Posture, motor activity and gait |
|☐| Dress, grooming, personal hygiene |
|☐| Odors (body or breath) |
|☐| Facial expression |

Measure height and weight. Include head circumference for children under 2 years of age.

Calculate BMI

Evaluate skin color, moisture, temperature, texture, mobility and turgor.

Evaluate individual skin lesions.

Evaluate shape and color of fingernails and toenails.

Evaluate quantity, distribution and texture of hair

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**Study Questions:**

1. What are attributes of a patient’s physical appearance or presentation that would get mentioned in the “General Appearance” portion of the physical exam?

2. What characteristics of skin should be recorded in the physical exam of the skin?

3. What characteristics of the hair-scalp and nails should be recorded?

4. Be sure you know the definitions of the terms for the skin lesions listed in that section of the Clinical Learning Guide.

5. How do you measure and record the height, weight, and (in children < 2 years old), head circumference?

6. What is the BMI? What is its significance? How do you calculate it?