GENERAL APPEARANCE

Objectives
- List features to observe as part of the general appearance of patients
- Describe some of the classic physical appearances of several diseases (ex. Marfan, Turner, Hyper- and Hypothyroidism)
- Use body mass index to define extremes of weight
- Identify a patient’s level of consciousness
- List steps to properly take a blood pressure

Question...
An astute physician gathers as much information as possible in the history and physical before beginning to think about the differential diagnosis.

• True or False?
Possible items to comment on for General appearance

1. General state of health
2. Level of comfort
3. Respiratory effort
4. Is there a disconnect between chronologic age and development?
5. Extremes of Height/Weight
6. Posture, motor activity, gait
7. Obvious deformities or distinguishing characteristics
   - Amputee? Scars from trauma or surgery?
8. Characteristic facies?
9. Dress, grooming, personal hygiene
10. Odor
11. Level of awareness or consciousness
12. Skin color/hair distribution

Think of specific diseases

Genetic disorders
  - Turner
  - Down
Neurologic disease
  - Parkinson disease
Endocrine disorders
  - Acromegaly
  - Cushing syndrome
  - Hyperthyroidism
  - Hypothyroid - myxedema

1. General state of health?
2. General level of comfort?
3. Abnormal Respiratory effort?

- Gasping for breath
- Labored breathing
- Coughing
- Unable to speak in sentences
- Using accessory muscles of respiration
- Audible wheezing/stridor

Dahl's Sign

A 25 year old male is at your office at 4 pm for a screening exam for his new job. He is obese, has no other known medical problems. On exam he has equal and symmetrical pulses of his radial, femoral and dorsalis pedis pulses. His blood pressure is slightly elevated.

What might be an explanation?

1. Probable coarctation of the aorta
2. The 8 oz. cup of coffee he drank at 8 am
3. The width and length of the cuff is too small
4. The sprint to your office because he thought he was late (but he ended up being 45 minutes early)
5. He has high blood pressure

Vital Signs

- Blood Pressure
- Part of General Survey

- Pick the right size cuff
- Width about 40% of upper arm circumference
- Length of inflatable cuff about 80% of upper arm circumference

- Avoid smoking, caffeine, or exercise 30 minutes prior
- Exam room is quiet and comfortable
- Sit quietly for 5 minutes in a chair with feet on the floor
- Arm is free of clothing, not with fistula, scars from brachial artery cut-down or lymphedema
- Position arm so brachial artery, at the antecubital crease is at heart level (~4th ICS)
- If seated, rest arm on table above patient’s waist, if standing, support arm at patient’s mid-chest.

New Blood Pressure Guidelines

2017 American College of Cardiology and American Heart Association

<table>
<thead>
<tr>
<th>Classification</th>
<th>Systolic</th>
<th>Diastolic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>$&lt;120$</td>
<td>$&lt;80$</td>
</tr>
<tr>
<td>Elevated</td>
<td>$120-129$</td>
<td>$&lt;80$</td>
</tr>
<tr>
<td>HTN Stage 1</td>
<td>$130-139$</td>
<td>$80-89$</td>
</tr>
<tr>
<td>HTN Stage 2</td>
<td>$&gt;140$</td>
<td>$&gt;90$</td>
</tr>
</tbody>
</table>

Based on the average of two or more readings, more than 2 occasions
4. Disconnect between chronologic age and development?

- Appears younger than stated age
- Appears older than stated age
  - Precocious puberty
  - Before age 7 females
  - Before age 9 males

5. Extremes of Height?
6. Extremes of Weight?

- Too little weight
  - Underweight (BMI < 18)
  - Cachectic, Malnourished, Emaciated
  - Eating disorder (anorexia)
  - Cancer
6. Posture/motor activity?

6. Gait?
7. Obvious deformities or distinguishing characteristics?

- Amputee?
- Prominent visible scars from surgery or trauma
- Visible piercings or tattoos

8. Characteristic Facies?

- Moon face of Cushing's
- Prognathism of acromegaly
- Stare of thyrotoxicosis
- Myxedema loss of lateral 1/3 of eyebrows, puffy face, dry skin and brittle hair
- Parkinson – masked face (immobile face), hunched posture, resting tremor, paucity of movement, no arm swing with walking, minimal blinking
- Color
  - Slapped cheeks – fifth disease
  - Butterfly = malar rash of lupus
- Decreased eye contact – cultural, fear, depression
As compared with the hand of a normal person, with the hand of a person who has acromegaly, right is enlarged. The fingers are widened, thickened and stubby, and the soft tissue is thickened (A). Facial aspect of a patient with acromegaly. The nose is widened and thickened, the cheekbones are obvious, the forehead bulges, the lips are thick and the facial lines are marked (B and C).
Acromegaly showing the patient before development of the tumor (picture on the left) and after development of the tumor (picture on the right). Note the coarse facial features and enlargement of the jaw and lips. (From Damjanov I: Pathology for the Health-Related Professions, 2nd ed. Philadelphia, WB Saunders, 2000, p 407.)

Endocrine Disorders
Goljan, Edward F., MD, Rapid Review Laboratory Testing in Clinical Medicine, CHAPTER 10, 341-384

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9. Dress Grooming/Hygiene/clothing?
- Disheveled
- Unkempt
- Excessive fastidiousness
- Is clothing clean, properly fastened?
- How does clothing compare with clothing of comparable age and social group?
- Is hair groomed, beard kempt?
- Inappropriate dress for season
9. Footwear?

- Slippers?
- Untied shoes?
- Thick edema (CHF, nephrotic syndrome)
- Cut holes in shoes?
- Painful foot conditions like bunions or gout

A, A 72-year-old woman presented with lymphedema of the left lower extremity after an extended hysterectomy with regional lymph node dissection performed 15 years previously because of uterine cancer. Severe lymphedema was evident (volume, 5413 mL).

B, Two lymphaticovenous side-to-end anastomoses (LVSEAs) were performed for the dorsum of the foot, three were performed for the leg, and one for the thigh.

C, Postoperative indocyanine green fluorescence lymphography shows patency of the LVSEA at the medial side of the dorsum of the foot, where a tree pattern was observed, and nonpatency at the other LVSEA of the foot (star, anastomosis site; triangles, lymphatic vessel; arrow, subcutaneous vein).

D, At 6 months after LVSEA, lymphedema of the left lower extremity has improved (volume, 4326 mL).

Outcomes of lymphaticovenous side-to-end anastomoses in peripheral lymphedema


Copyright © 2012 Society for Vascular Surgery
10. Odors?

11. Level of awareness or consciousness

- Confused – delirious (inpatients)
- Anxious – fidgety
- Manic - Hyper – expansive movements
- Depressed (Slow, slumped posture, disinterested, gloomy)
- Peds – inconsolable, crying, won’t play with favorite toys

Levels of consciousness

<table>
<thead>
<tr>
<th>Stimulus needed for Response</th>
<th>Response</th>
<th>Level of Consciousness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal conversation</td>
<td>Normal response</td>
<td>Alert</td>
</tr>
<tr>
<td>Loud questioning</td>
<td>Drowsy, but responds</td>
<td>Lethargic</td>
</tr>
<tr>
<td>Gentle touch or movement</td>
<td>Open eyes, slow response, may be confused</td>
<td>Obstunded</td>
</tr>
<tr>
<td>Painful stimulus Ex. Sternal rub, pressure on fingernail</td>
<td>Minimal to no response May exhibit posturing</td>
<td>Comatose</td>
</tr>
</tbody>
</table>
12. Skin color/hair distribution

Color Changes
- **Yellow**: Jaundice, Hypercarotenemia
- **Blue**: Cyanosis - central vs peripheral, Silver ingestion
- **Red**: Sunburn, Disease, Allergy, Toxin

Hair Distribution
- Hirsute females, normal variation vs. virilization
- Alopece - cancer treatment?

Diaphoretic, excessively dry, temperature...

Hypopigmentation

Central cyanosis of the lips. The general examination...
Cyanosis

Bluish-silver discoloration of the patient’s face, cheeks, nose, and fingers following the use of silver-containing anti-aging creams. The discoloration develops on exposure to sunlight. Are silver compounds toxic to the kidney?

Mayr, Michael, MD, American Journal of Kidney Diseases, Volume 53, Issue 5, 890-894

Copyright © 2009 National Kidney Foundation, Inc.
Carotenemia. The patient's legs are noticeably orange when compared to the photographer's hand.

Conjunctival icterus. Xanthoderma: A clinical review.
Yellow-orange pigmentation characteristic of carotenemia. Syndromes associated with nutritional deficiency and excess

Dramatic change in physical appearance before (A) and 1 month after (B) treatment with paclitaxel and carboplatin. 

Chemotherapy-induced alopecia.

Avoid the default to "WDWN male in NAD"

“Well developed, well nourished male in no apparent distress”
Reminders and Your "To Do" list:

- Small group: sign in and introductions
- Lecture and questions reviewed
- Discuss photos provided in context of general appearance/care as much vocabulary as you can
- Pick a small group representative. Let the course coordinator know today
- Fill out evaluation form as a group, small group rep return folder to the coordinator
- Monday, August 26 at noon

IF Facilitator: Absent in small groups-----

Let Alison know.

Know your small group number/faculty names.

Tomorrow: August 27, 2019 Radiology Lecture (Radiology Vertical Curriculum) 4 pm room 332

Thursday: August 29, 2019, 10:30 am, room 330 ENT

PEDI SHADOWING OPT OUT by Friday 8-29, 5 pm

Next week Tuesday: lecture: Ophthalmology 1 pm

Small group: Lecture and question review for both the ENT and OYE lectures

- Read the assignment, linked through the Library
- Bring your ophthalmoscope and otoscope——fully charge equipment

See objective pages to prepare for each session ahead of time

ENT