Physical Assessment Techniques

Physical Assessment

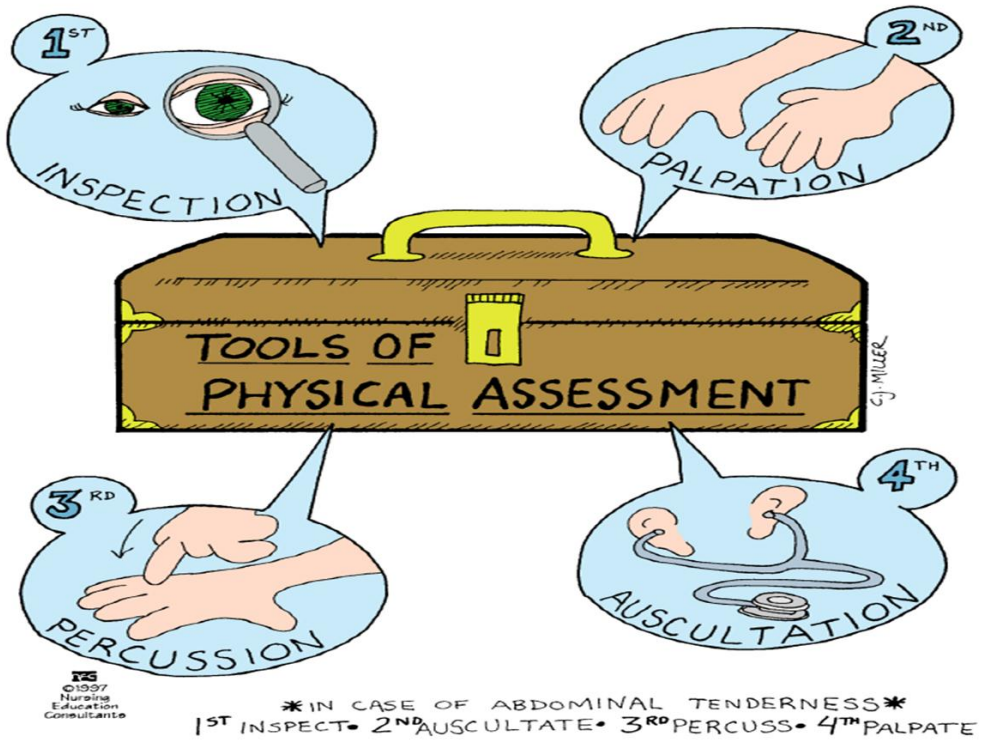
There are four techniques to use in performing physical assessment:

1.Inspection

2. Palpation

3. Percussion

4. Auscultation

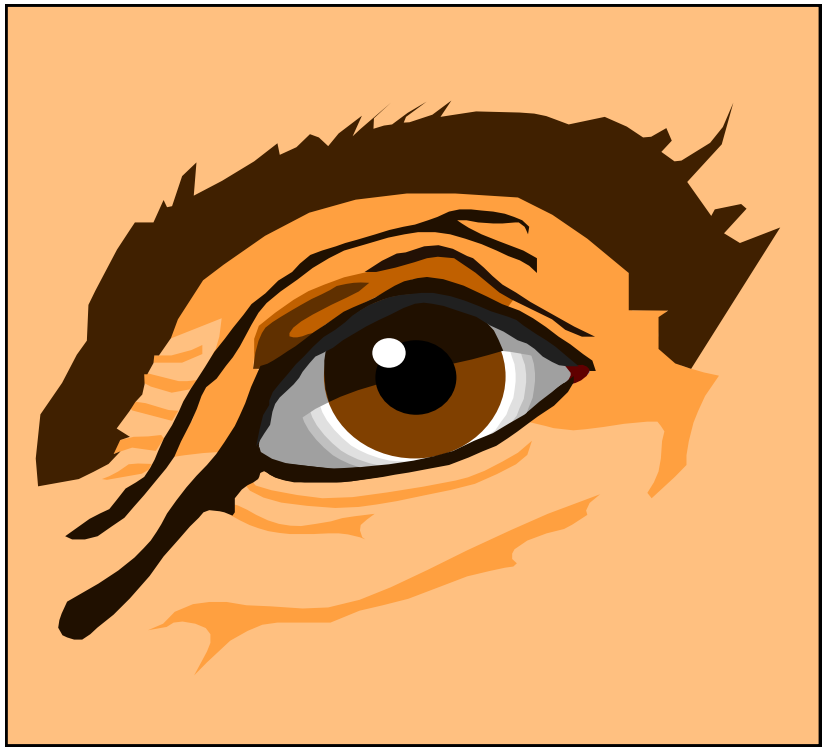


Inspection:

1. **Inspection is defined as “the use of the senses of vision, smell and hearing to observe the normal condition or any deviations from normal of various body parts.”**
2. **The nurse inspects or looks body parts to detect normal characteristics or significant physical sings.**
3. **Inspection helps to know normal characteristics before trying to distinguish abnormal findings in different ages.**
4. **The quality of an inspection depends on the nurse's willingness to spend time doing a thorough job.**

Inspection

1. Use vision, hearing & smell
2. Always first
3. Look for symmetry
4. Use good lighting
5. Use good exposure



Principles of Accurate Inspection

1. Good lightening either day light or artificial light is suitable.
2. Expose body parts being observed only.
3. look before touching.
4. warm room for examination of the client “not cold not hot".
5. Observe for color, size, location, texture, symmetry, odors, and sounds.
6. Compare each area inspected with the opposite side of body if possible.
7. Use pen light to inspect body cavities.

Palpation

* Touch & feel with hands to determine:

✓Texture – use fingertips (roughness, smoothness).

✓Temperature – use back of hand (warm, hot, cold).

✓Moisture (dry, wet, or moist).

✓Organ location and size

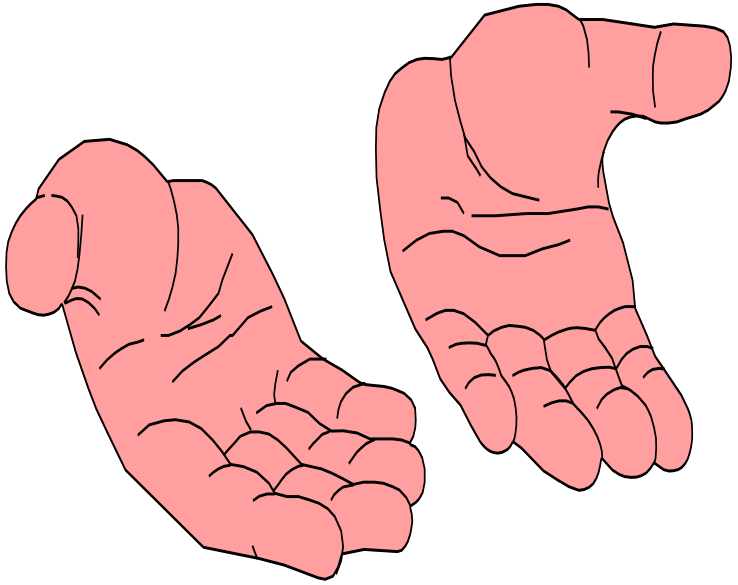
✓Consistency of structure (solid, fluid, filled)

* Slow and systematic

* Light to deep

* Light palpation (tenderness)

* Deep palpation (abdominal organs/masses)



- **Principles for Accurate Palpation**
- Examiner finger nails should be short.
- Use sensitive part of the hand.
- Light Palpation precedes deep palpation.
- Start with light then deep palpation
- Tender area are palpated last

Light and Deep palpation

- Tell client to take slow deep breath to enhance muscle relaxation.
- Examine condition of the abdominal organs
- Depressed areas must be approximately “2cm”
- Assess turger of skin measured by lightly grasping the body part with finger tips.

Percussion

1. Tap a portion of the body to elicit tenderness that varies with the density of underlying structures.
2. Percussion denotes location, size and density of underlying structures, percussion requires dexterity.
3. Methods of percussion:
4. Direct method: involving striking the body surface directly with one or two fingers.
5. Indirect method: performed by placing the middle finger of the examiner's non dominant hand "pleximeter hand" firmly against the body surface with palm and fingers remaining off the skin, and the tip of the middle finger of the dominant hand "plexor" strikes the base of the distal joint of the pleximeter. Use a quick & sharp stroke

FIGURE 24-2 Perform indirect percussion with two hands, using the finger of one hand to tap on the finger of the other hand.

Description of sounds

1. Sound produced by the body is characterized by intensity, frequency, duration and quality.
2. Intensity, or loudness, associated with physiologic sound is low; thus, the use of the stethoscope is needed.
3. Frequency, or pitch, of physiologic sound is in reality “noise” in that most sounds consist of a frequency spectrum as opposed to the single-frequency sounds that we associate with music or the tuning fork.
4. Duration relates to the time elapsed from the beginning of the sound till the end of the sound.
5. Quality of sound relates to overtones that allow one to distinguish between different sounds.

Five percussion sounds produced in different body regions

1. Resonant – normal lung

2. Hyper resonant: it's a louder and lower pitched than resonant sounds. Normally heard in children and very thin adults , and abnormally in emphysema

3. Tympany : A hollow drum-like sound produced when a gas-containing cavity is tapped sharply. Tympany is heard if the chest contains free air (pneumothorax) or the abdomen is distended with gas air filled (stomach)

4. Dull or thud like sounds are normally heard over dense areas such as the heart or liver. Dullness replaces resonance when fluid replaces air-containing lung tissues, such as occurs with pneumonia, pleural effusions, or tumors

5. Flat: shown in no air areas such as thigh muscle, bone and tumor

Auscultation

"To listen for various breath, heart, and bowel sounds"

Direct or immediate auscultation is accomplished by the unassisted ear that is without amplifying device. This form of auscultation often involves the application of the ear directly to a body surface where the sound is most prominent.

Mediate auscultation: the use of sound augmentation device such as a stethoscope in the detection of body sounds.

Auscultation

1. Listening to body sounds
2. Movement of air (lungs)
3. Blood flow (heart)
4. Fluid & gas movement (bowels)
5. Remember the sound changes in the abdomen

Figure 25-3 Stethoscope bell and diaphragm. Use the **diaphragm** of the stethoscope to detect high pitched sounds. The diaphragm should be at least 1.5 inches wide for adults and smaller for children. Hold the diaphragm firmly against the body part being auscultated. Use the **bell** of the stethoscope to detect low-pitched sounds. The bell should be at least 1 inch wide. Hold the bell lightly against the body part being auscultated.