

GOVERNMENT COLLEGE OF NURSING B.R.D MEDICAL COLLEGE CAMPUS GORAKHPUR

CERTIFICATE

This is to certify that **ANKITA SINGH**, a student of B.Sc. Nursing, Second Semester Batch 2024 at Government College of Nursing, B.R.D. Medical College Campus, has successfully completed the **Health Assessment Module** as part of the curriculum for the academic year **2024-2025**.

This module was designed to provide students with essential knowledge and skills in health assessment, emphasizing compassionate and holistic approaches to patient care. The successful completion of this program signifies the student understands and is competent in providing quality care to patients and their families during critical phases.

We commend _____ for their dedication and commitment to learning this important aspect of nursing.

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I would like to express my sincere gratitude to all those who contributed to the successful completion of this module on Health Assessment.

Firstly, I extend my heartfelt thanks to our esteemed faculty members for their continuous support, expert guidance, and encouragement throughout this learning journey. Their deep knowledge and clinical experience have significantly enhanced my understanding of comprehensive health assessment techniques and their application in nursing practice.

I am also deeply grateful to the management and staff of Government College of Nursing, B.R.D. Medical College Campus, Gorakhpur, for providing the necessary resources, infrastructure, and learning environment that made this module possible.

A special note of appreciation is reserved for the patients and individuals who allowed us to engage in real-time health assessments. Their willingness and cooperation provided us with valuable clinical exposure and helped bridge the gap between theory and practice.

I would also like to thank my classmates for their collaboration, encouragement, and shared learning. Their companionship and support have made this educational experience more meaningful and enjoyable.

Thank you all for helping me realize the importance of health assessment in delivering holistic, patient-centered nursing care

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PREFACE

When we speak about health assessment, it is unanimously agreed that the most important person is the care-recipient — that is, the patient first, followed by their family. All assessments revolve around the patient's well-being, needs, and accurate understanding of their condition.

But if health assessment is a collaborative effort, who comes next in importance on the team? In my view, it is the team member who offers the most valuable input for accurate and holistic understanding of the patient's condition. This role can shift depending on the situation.

For instance, in a patient with complex symptoms, it might be the physician whose diagnostic acumen helps pinpoint the condition. In cases where the patient's mental health or social background influences their physical health, the psychologist or medical social worker may play a pivotal role by uncovering key contributing factors. For infants or individuals with special needs, it could be the occupational therapist or developmental specialist who helps assess functional capabilities and daily living skills.

Yet, for the majority of cases, the nurse is often the most important team member in the health assessment process. Nurses spend the most time with patients, observing subtle changes, conducting regular vital assessments, monitoring pain and behavior, and evaluating response to interventions. They often notice early warning signs that others may overlook. They provide physical care, emotional support, and are frequently the first point of contact for patients and families. Nurses are also instrumental in advocating for the patient's needs and upholding ethical standards in care.

For these reasons, we celebrate the Indian Nursing Council's step to emphasize Health Assessment as a core component in the B.Sc. Nursing curriculum, aligning education with the real-world needs of patient care. However, as is often the case, there remains a significant gap between policy and actual implementation in many parts of the country. Addressing this will be crucial to empowering nurses and improving overall healthcare quality.

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INTRODUCTION

Health assessment is a foundational aspect of nursing and medical practice, focusing on the systematic evaluation of an individual's physical, psychological, and social well-being. It begins with the collection of a detailed health history, followed by a comprehensive physical examination. Together, these components help healthcare providers gather essential information about the patient's current health status, identify health needs, and formulate individualized care plans.

A successful health assessment is not merely about collecting data—it requires:

- A practical understanding of assessment techniques and clinical tools.
- Awareness of the time and resources needed to conduct assessments efficiently and respectfully.
- The ability to interpret findings accurately and integrate them into planning, decision-making, and care implementation.

Health assessments also serve as baseline references, helping track changes over time, detect early signs of disease, and evaluate the effectiveness of treatment interventions. In nursing, they are critical for promoting patient safety, improving outcomes, and delivering holistic, patient-centered care.

Thus, learning and mastering health assessment skills are vital for all healthcare professionals, particularly nurses, who are often the first to assess and monitor patients on a continuous basis.

Purposes of Health Assessment

- 1. Establishing a Health Baseline and Database:** At its core, a health assessment establishes a "snapshot" of an individual's current health. This baseline includes vital signs, physical examination findings, a detailed health history, and information about lifestyle and social factors. This database serves as a crucial reference point for future assessments, allowing healthcare providers to track changes, identify trends, and evaluate the effectiveness of treatments over time.
- 2. Diagnosis and Problem Identification:** A primary and immediate purpose of a health assessment is to identify and diagnose health problems. By systematically collecting and analyzing both subjective data (what the person says) and objective data (what is observed and measured), healthcare professionals can pinpoint the nature and cause of a patient's symptoms or concerns. This can range from identifying an acute infection to diagnosing a chronic illness like diabetes or heart disease.
- 3. Planning and Implementation of Care:** Once health needs and problems are identified, the health assessment guides the development of a personalized care plan. This plan outlines specific goals, interventions, and treatments tailored to the individual's unique circumstances. The assessment findings help in prioritizing care, ensuring that the most critical issues are addressed first. For example, in a hospital setting, an initial assessment determines the level of care a patient requires.
- 4. Prevention and Health Promotion:** Health assessments are not solely for the sick; they are a cornerstone of preventive medicine. Regular assessments can identify risk factors for various diseases, such as high blood pressure, high cholesterol, or a family history of cancer. This early identification allows for timely interventions, including lifestyle modifications, health education, and screening tests, to prevent the onset of disease or to detect it at its most treatable stage.
- 5. Evaluation of Treatment and Outcomes:** For individuals undergoing treatment for a health condition, ongoing health assessments are essential to monitor their progress and the effectiveness of the interventions. By comparing current assessment findings with the baseline data, healthcare providers can determine if the treatment is working, if any adjustments are needed, or if any adverse effects have developed.

Preparation for Health Assessment

Proper preparation for a health assessment ensures a more accurate and effective consultation. Here's a brief guide for both individuals and healthcare providers.

For Individuals: Getting Ready for Your Appointment

To make the most of your visit, a little preparation goes a long way.

Gather Your Information:

- **Medications:** List all current prescriptions, over-the-counter drugs, vitamins, and supplements, including dosages.
- **Health History:** Be ready to discuss your past illnesses, surgeries, and any chronic conditions.
- **Family History:** Know if close relatives have had major conditions like heart disease, diabetes, or cancer.

Prepare for the Visit:

- **Write Down Questions:** Note any health concerns or questions you want to ask your provider.
- **Follow Instructions:** Adhere to any specific instructions, such as fasting (no food or drink except water) for 8-12 hours if required for blood tests.
- **Dress Comfortably:** Wear loose-fitting clothes that are easy to adjust for a physical examination.

On the Day of the Assessment:

- **Bring Essentials:** Have your ID, insurance details, and your list of medications and questions ready.
- **Be Honest:** Share openly about your lifestyle, including diet, exercise, smoking, and alcohol use. This is crucial for an accurate assessment.

For Healthcare Providers: Ensuring a Smooth Assessment

Healthcare professionals also prepare to ensure the consultation is efficient and patient-centered.

- **Review Patient History:** The provider reviews the patient's past medical records, lab results, and previous diagnoses to understand their health background.
- **Prepare the Environment:** The examination room is set up to be clean, private, and well-lit. All necessary medical equipment (like a stethoscope, blood pressure cuff, and thermometer) is checked and made easily accessible.
- **Ensure Safety and Comfort:** The provider focuses on creating a safe space, performing hand hygiene, and preparing to listen actively to build trust and encourage open communication with the patient.

Methods of Physical Assessment

Health assessment is a crucial process in healthcare that involves systematically collecting and analyzing information about a person's health status. It aims to identify actual or potential health problems, establish a baseline for care, and develop effective care plans.

These are the fundamental techniques used to gather information during a physical examination:

Inspection:

- **Description:** This is the visual examination of the body using the naked eye, as well as the senses of smell and hearing. It's often the first step in a physical assessment.
- **What to look for:** Color, size, shape, location, movement, symmetry, texture, odors, and any deviations from normal.
- **Examples:** Observing skin for pallor or jaundice, checking for swelling in the legs, noting the overall appearance and gait.

Palpation:

- **Description:** This involves using the hands and fingers to feel for abnormalities or assess various characteristics of the body.
- **Techniques:**
 - **Light palpation:** Used to feel for surface abnormalities (e.g., texture, tenderness, temperature, moisture, elasticity, pulsations, superficial masses). Depress the skin about 0.5 to 0.75 inches (1-2 cm).
 - **Deep palpation:** Used to feel internal organs and masses for size, shape, tenderness, symmetry, and mobility. Depress the skin 1.5 to 2 inches (4-5 cm) with firmer pressure, sometimes using two hands.
- **Examples:** Feeling for enlarged lymph nodes, palpating the abdomen to check organ size and tenderness, assessing pulses.

Percussion:

- **Description:** This technique involves tapping fingers or hands sharply against parts of the patient's body to produce sounds or vibrations. The sounds provide clues about the underlying tissue or organ.
- **Purpose:** To locate organ borders, identify organ shape and position, and determine if an organ is solid, fluid-filled, or gas-filled.
- **Types:**
 - **Direct percussion:** Tapping directly on the body part with one or two fingers.
 - **Indirect percussion:** Pressing the middle finger of the non-dominant hand firmly on the body part and tapping quickly and directly over it with the middle finger of the dominant hand.
- **Sound interpretation:**
 - **Hollow sound:** (e.g., normal lungs)
 - **Dull/Solid sound:** (e.g., liver, bones, tumors)
 - **Tympanic/Drum-like sound:** (e.g., air-filled abdomen, stomach)

Auscultation:

- **Description:** This involves listening to sounds produced within the body, typically using a stethoscope.
- **Purpose:** To assess heart sounds, lung sounds, bowel sounds, and blood flow (e.g., bruits in arteries).
- **Techniques:**
 - **Direct auscultation:** Listening with the ear alone (less common).
 - **Indirect auscultation:** Using a stethoscope to amplify sounds.
 - **Diaphragm:** Used for high-pitched sounds (e.g., S1, S2 heart sounds, bowel sounds). Hold firmly.
 - **Bell:** Used for low-pitched sounds (e.g., S3, S4 heart sounds, some murmurs). Hold lightly.

- **Examples:** Listening to heart rate and rhythm, assessing breath sounds for crackles or wheezes, checking for active bowel sounds.

A. COMPREHENSIVE HEALTH ASSESSMENT

I. Nursing Health History

General Survey

Includes:

- **Demographic Information** – Age, gender, occupation, marital status, etc.
- **Physical Environmental History** – Living conditions, housing, hygiene, exposure to physical hazards.
- **Biological Environmental History** – Exposure to infectious diseases, allergens, or toxins.

Health History

Covers:

- **Family Health History** – Information about hereditary or genetic conditions.
- **Personal Health History** – Lifestyle habits, current medications, allergies, past illnesses, and surgeries.
- **Medical History** A complete review of past and present medical conditions, hospitalizations, treatments, and ongoing health issues.

II. Physical Assessment

General Appearance, Mental Status, Anthropometric Measurements, and Vital Signs

General Appearance and Mental Status

The assessment begins by observing the patient's overall physical appearance, hygiene, posture, and any signs of distress or discomfort. Mental status includes level of consciousness, orientation, speech, and behavior.

Anthropometric Measurements

Anthropometric assessment techniques involve measuring the human body's dimensions and composition. Here are some common techniques:

Measurement techniques:

1. Stadiometer: Measures height.
2. Scale: Measures weight.
3. Tape measure: Measures circumferences (waist, hip, arm, etc.).
4. Skinfold caliper: Measures subcutaneous fat.
5. Bioelectrical impedance analysis (BIA): Estimates body fat percentage.

Measurement protocols:

1. Standardized positioning: Ensures accurate measurements.
2. Calibration: Ensures accuracy of measurement tools.
3. Repeated measurements: Ensures reliability.

Common anthropometric measurements:

1. Height: Standing or recumbent length.
2. Weight: Body mass.
3. BMI: Weight-to-height ratio.
4. Waist-to-hip ratio: Assesses body fat distribution.
5. Skinfold measurements: Assess subcutaneous fat.

Tips for accurate measurements:

1. Use calibrated equipment: Ensure accuracy.
2. Follow standardized protocols: Ensure consistency.
3. Take multiple measurements: Ensure reliability.

Vital Signs

Key indicators of physiological functioning are measured and recorded:

- Pulse
- Blood Pressure
- Body Temperature
- Respiratory Rate

2. Assessment of the Integumentary System (Hair, Skin, and Nails)

Inspection:

- Observe the skin color, hair quality and distribution, and note the condition and type of any visible lesions including their size, location, and color.

- Examine the nail beds for color and assess the angle of nail curvature to check for signs of clubbing or oxygen deficiency.

Palpation:

- Assess the skin temperature, moisture level, and turgor to evaluate hydration status.
- Check for the presence or absence of edema or any unusual swelling.

3. Assessment of the Head & Neck (Face and Skull, Eyes, Ears, Nose, Mouth, Throat, and Neck)

3.1 Face and Skull

- **Inspection:** Observe the size, shape, and symmetry of the face and skull. Note facial expressions and movement for symmetry and coordination.
- **Palpation:** Feel for any lumps, tenderness, or masses on the skull and facial bones.

3.2 Eyes

- **Inspection:** Evaluate pupils for equality, reaction to light, and accommodation (PERRLA). Look for any redness, discharge, irritation, or abnormal eye movements.
- **Standardized Testing:** Use a Snellen chart to assess visual acuity.

3.3 Ears

- **Inspection:** Check auricles for symmetry, color, elasticity, and the presence of lesions or tenderness. Examine the external auditory canal for drainage, wax, or discoloration. Inspect the tympanic membrane for color, integrity, and bulging.
- **Standardized Testing:** Perform Rinne's and Weber's tests with a tuning fork to evaluate hearing.

3.4 Nose

- **Inspection:** Assess nasal shape, size, color, symmetry, and check for drainage, flaring, or deformities. Use an appropriately sized otoscope to inspect the nasal passages. Evaluate the sense of smell.
- **Palpation:** Palpate the sinuses to detect tenderness or signs of infection.

3.5 Mouth and Throat

- **Inspection:**
 - Inspect lips for symmetry and color.
 - Examine buccal mucosa, gums, and tongue for color, moisture, and lesions.
 - Assess tongue for movement and symmetry.

- Check teeth for alignment, looseness, or missing teeth.
- Observe the uvula for position and movement during phonation.
- Evaluate salivary glands for redness or swelling.
- Inspect the oropharynx, tonsils, and hard/soft palate for color, texture, and lesions.
- Test the gag reflex.
- Use a tongue depressor and light source for full visibility.

3.6 Neck

- **Inspection:** Observe neck movement and symmetry. Look for thyroid swelling and its movement during swallowing.
 - **Palpation:** Palpate the neck, lymph nodes, thyroid gland, and trachea for size, mobility, and any abnormalities.
-

4. Assessment of the Breast and Axillae

Inspection

- Visually examine the breasts for size, shape, symmetry, and color. Look for any dimpling, skin changes, lesions, swelling, edema, visible lumps, or nipple retractions. The nipples should also be checked for any discharge, which is considered abnormal in both males and non-lactating females.

Palpation

- Use the fingertips to carefully examine the entire breast area for the presence of lumps or masses. Additionally, palpate the axillary lymph nodes to assess for any swelling or enlargement, which could indicate infection or other abnormalities.
-

5. Assessment of the Respiratory System (Thorax and Lungs)

5.1 Thorax Assessment

- **Inspection:** Examine the front and back of the thorax for shape, size, symmetry, skin condition, and spinal alignment. Observe chest movement for normal diaphragmatic motion during breathing.
- **Palpation:** Assess the back of the thorax for respiratory expansion and tactile fremitus (vibrations from spoken sounds).
- **Percussion:** Tap the thorax to detect differences in sound, helping to distinguish normal from abnormal lung areas.

5.2 Lung Assessment

- **Auscultation:** Listen for normal lung sounds (vesicular, bronchial, and bronchovesicular) and abnormal sounds (e.g., crackles/rales, wheezes, rhonchi, pleural friction rub). Special voice sounds like bronchophony, egophony, and whispered pectoriloquy may also be assessed.
 - **Percussion:** Continue with percussion to help identify lung areas filled with air, fluid, or solid tissue.
-

6. Assessment of the Cardiovascular System (Heart)

- **Inspection:** Look for visible pulsations on the chest that might suggest an aortic aneurysm.
 - **Auscultation:** Listen to heart sounds—S1 and S2 (normal), and S3, S4, clicks, and knocks (which may be abnormal). Note that S2 may be normal in people under 40.
-

7. Assessment of the Abdomen

- **Inspection:** Visually assess the abdomen's size, shape, and symmetry. Look for skin abnormalities or pulsations indicating possible aneurysms.
 - **Auscultation:** Use a stethoscope to listen to bowel sounds in all four quadrants (RUQ, LUQ, RLQ, LLQ).
 - **Palpation:** Begin with light palpation, followed by deep palpation to identify any masses, tenderness, guarding, or rebound pain.
-

8. Assessment of Male and Female Genitalia

- **Inspection:** Examine pubic hair and external genitalia.
 - In females: inspect the labia, clitoris, vagina, and urethral opening.
 - In males: inspect the penis, urethral opening, and scrotum.
 - **Palpation:** Check the inguinal lymph nodes for tenderness or swelling. In males, perform testicular examinations for abnormalities.
-

9. Assessment of the Rectum and Anus

- **Inspection:** Visually examine the rectum, anus, and surrounding areas for signs of abnormality.
 - **Palpation:** Wearing gloves, assess the rectal sphincter for tone and check for blood, pain, nodules, or other irregularities.
-

10. Assessment of the Musculoskeletal System

- **Inspection:** Observe the major muscles for size, symmetry, strength, tremors, contractures, or signs of weakness or paralysis. Examine joint range of motion and check for deformities or swelling.
 - **Palpation:** Feel the muscles for firmness, spasticity, flaccidity, pain, and involuntary movements like tremors.
-

11. Assessment of the Peripheral Vascular System

- **Inspection:** Check extremities for color changes, swelling, or signs of poor blood flow, especially in the legs. In a lying position, examine jugular veins for distention or abnormal pulsation.
 - **Auscultation:** Listen to carotid arteries for bruits (abnormal sounds suggesting narrowing).
 - **Palpation:** Assess skin temperature, tenderness, and swelling of peripheral veins. Check peripheral pulses on both sides for strength, rhythm, and equality.
-

12. Assessment of the Neurological System

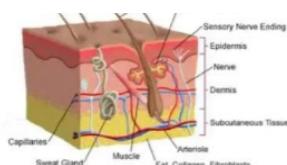
This is one of the most detailed assessments and includes:

- **Inspection:** Observe balance, walking (gait), large and fine motor functions, coordination, sensory responses (touch, temperature, position sense), and evaluate all cranial nerves.

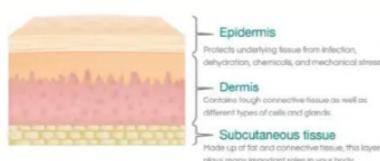
Some of the terms and terminology relating to the neurological system and neurological system disorders are given in Annexure 1.

B. GUIDE IN PERFORMING A HEAD-TO-TOE PHYSICAL ASSESSMENT

1. Assessment of the Integumentary System (Hair, Skin, and Nails)



Layers Of The Skin



PALPATION

- Texture
- Moisture
- Temperature
- Mobility
- Turgor

3. Palpate the skin to assess for texture. Use the palmar surface of hands and finger pads.
4. Palpate for moisture and temperature. Use the dorsal surface of hands.
5. Palpate the skin for mobility and turgor. Slightly pinch the skin under the clavicle using thumb and forefinger.¹
6. Inspect and palpate the skin for lesions.

INSPECTION

- 1) Inspect the skin for generalized color.

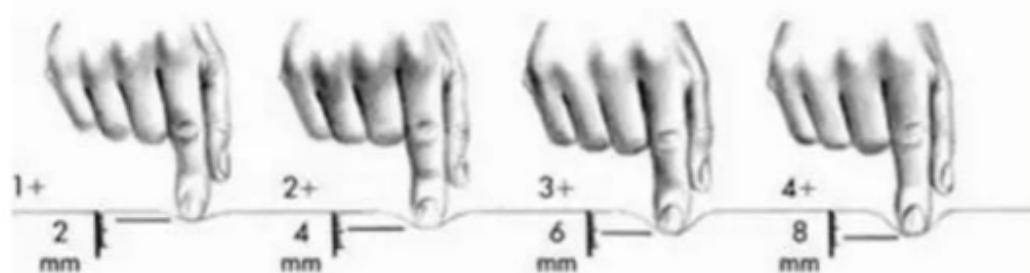
NORMAL	ABNORMAL
Evenly colored skin tones without unusual or prominent discolorations.	Pallor – Pale to Ashen (Loss of Color) Seen in arterial insufficiency, decreased blood supply, and anemia

DESCRIPTION	LIGHT SKIN	DARK SKIN
Cyanosis (Bluish)	Bluish Tinge	Ashen Gray
Pallor (Paleness)	Loss of Rosy Glow	Ashen Gray (Dark Skin) Yellowish Brown (Brown Skin)
Erythema (Redness)	Visible Redness	Diffused; Rely on palpation of warmth or edema.
Petechiae (Small Size Ecchymosis)	Pinpoint Purplish Pinpoints	Usually Invisible Check Oral Mucosa Conjunctiva Eyelids Conjunctiva Covering Eyeballs
Jaundice (Yellow)	Yellow Sclera, Skin, Fingernails, Soles, Palms, Oral Mucosa	Reliable on Sclera Hard Palate Palms and Soles

Assessing Lesions

- Vary in size, shape, and cause.
- Primary vs. Secondary
- Eruptions
 - Cysts, Wheals, Bullous, Pustules, Psoriasis, Eczema, Vesicles, Bullae, Nodules, Papules
- Etiology
 - Infections
 - Herpes, Impetigo, HIV, Melanoma
 - Toxic Chemicals
 - Skin Irritation
 - Physical Trauma
 - Burns, Lacerations
 - Hereditary Factors
 - External Factors
 - Allergens, Contact Dermatitis
 - Systemic Diseases
 - Measles, Lupus, Nutritional Deficiency

7. Palpate skin to detect edema. Use your thumb to press down on the skin of the ankles.



ASSESSMENT OF THE SCALP AND HAIR

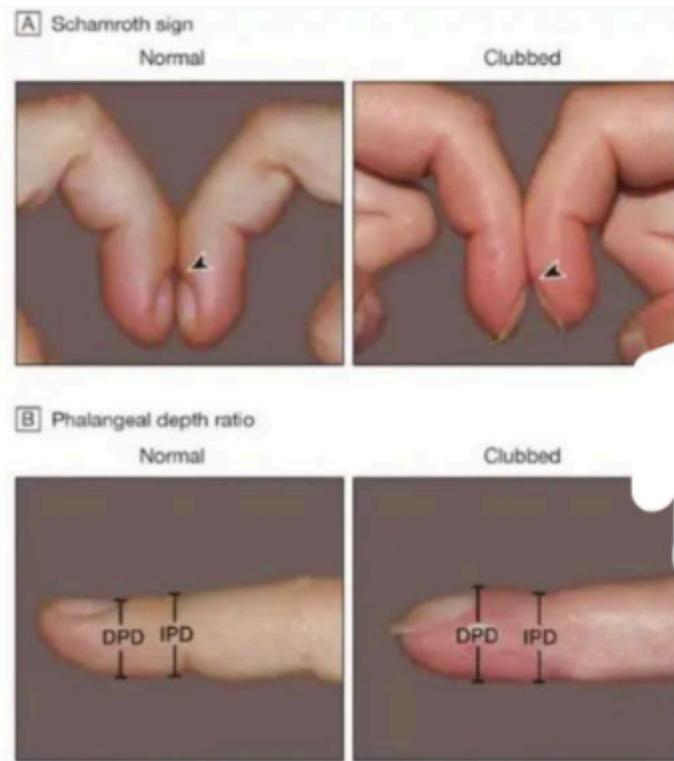
- Ask client to remove any hairpins, wigs, or hairpieces. Part and divide the hair at 1 inch interval.
- Inspect and palpate the scalp and hair for color, surface characteristics, quantity and hair distribution.
- Inspect the hair for texture. Roll a few strands of hair between thumb and forefinger.
- Inspect facial and body hair for distribution, quantity and texture (pubic hair is optional).
- Inspect the scalp for lesions.

ASSESSMENT OF THE NAILS

- Inspect nails for grooming and cleanliness.

- Inspect nails for color and thickness and markings.
 - Inspect the nails surface to determine its smoothness. Note grooves, depressions, pitting and ridges.
 - Inspect and palpate the nails for shape and contour.
 - Inspect the nail base angle (angle of proximal nail fold and nail plate).
 - Assess the nails for nail clubbing by performing Schamroth Test.
 - Perform capillary nail refill test.
-

1.



2. Assessment of the Head and Neck (Skull, Scalp, Hair, Face, Eyes, Ears, Nose, Mouth, Throat, Neck)

Head:

Inspect the face and hair:

* Inspect the overall appearance of the face (are the eyes and ears at the same level?)

* Is the head an appropriate size for the body?

- * Is the face symmetrical
 - * no drooping of the face on one side (eyes or lips). This can happen in Bell's palsy or stroke.



- * Are the facial expressions symmetrical (no involuntary movements)?
- * Any lesions?
- * Skin breakdown (especially on the back of the head in immobile patients)?
- * Inspect the hair for any infestations: lice, alopecia areata (round abrupt balding in patches), nevus on the scalp etc.



Palpate the cranium and inspect the hair for infestations, hair loss, skin breakdown or abnormalities:

- * Palpate for any masses or indentations
- Palpate the temporal artery bilaterally
- * Have the patient bite down and feel the masseter muscle and temporal muscle
 - * Then have the patient try to open the mouth against resistance

Palpate the temporomandibular joint for grating or clicking: Have the patient open and close the mouth and feel for any grating sensation or clicking.

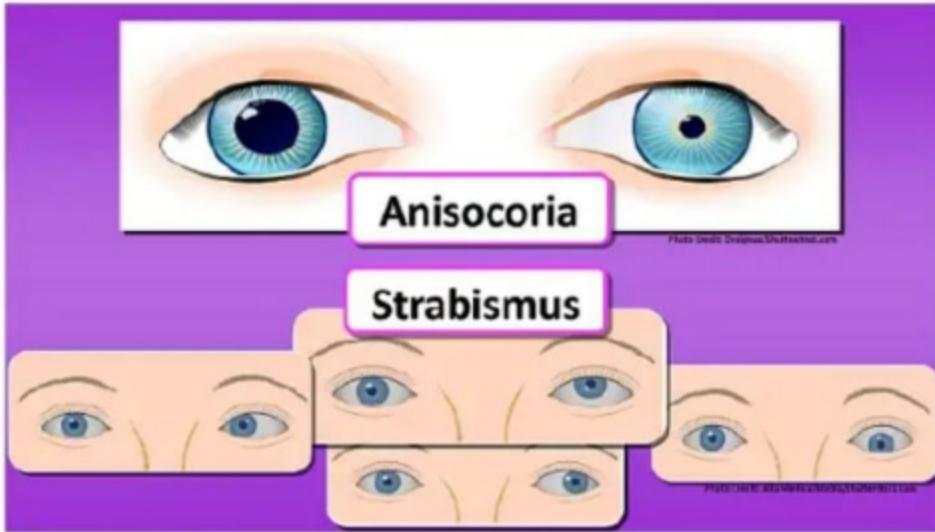
Palpate the frontal and maxillary sinuses for tenderness: patient will pressure but should not feel pain

Eyes:

Inspect the eyes, eyelids, pupils, sclera, and conjunctiva



- * Is there swelling of the eyelids?
- * Is the sclera white and shiny? not yellow as in jaundice
- * Is the conjunctiva pink NOT red and swollen?
- * Look for Strabismus and Anisocoria:
 - * Strabismus: Do the eyes line up with another?
 - * Anisocoria: Are the pupils equal in size or is one pupil larger than the other?



- * Are the pupils clear and not cloudy?
 - * Normal pupil size should be 3 to 5 mm and equal
- * Have the patient follow your pen light by moving it 12-14 inches from the patient's face in the six cardinal fields of gaze (start in the midline)
 - * Watch for any nystagmus (involuntary movements of the eye)
- * Reactive to light?
 - * Dim the lights and have the patient look at a distant object (this dilates the pupils)
 - * Shine the light in from the side in each eye.
 - * Note the pupil response: The eye with the light shining in it should constrict (note the dilation size and response size (ex: pupil size goes from 3 to 1 mm) and the other side should constrict as well.)
 - * Accommodation?
 - * Make the lights normal and have the patient look at a distant object to dilate pupils, and then have the patient stare at pen light and slowly move it closer to the patient's nose.
 - * Watch the pupil response: The pupils should constrict and equally move to cross.

If all these findings are normal you can document PERRLA.

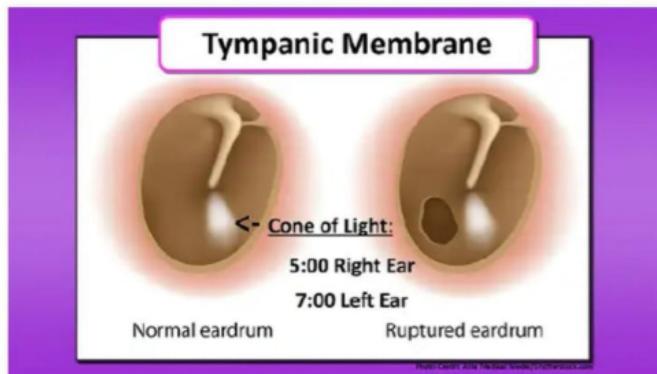
Ears:

Inspect the ears for:

- * Drainage (ear wax) or abnormalities
 - Ask the patient if they are experiencing any tenderness and palpate the pinna and tragus.
 - Palpate the mastoid process for swelling or tenderness.

Inspect the tympanic membrane:

- Use an otoscope to look at the tympanic membrane. It should appear as a pearly gray, translucent color and be shiny. Remember for an adult: pull up and back and for a child down and back on the pinna.
- Also, the cone of light should be at the 5:00 position in the right ear and 7:00 position in the left ear.



Nose:

Inspect nose

Palpate the lymph nodes with the pads of fingers and feel for lumps, hard nodules, or tenderness:

- Preauricular, postauricular, occipital, parotid, jugulodigastric (tonsillar), submandibular, submental, superficial cervical, deep cervical chain, posterior cervical, supraclavicular

Palpate the trachea and confirm it is midline

Palpate thyroid gland from the back: note for nodules, tenderness or enlargement...normally can't palpate it.

Palpate the carotid artery (one side at a time) and grade it (0 to 4, 2 is normal)

- Drainage (ask patient if they are having any discharge)
- Use a penlight to shine inside the nose and look for any lesions, redness, or polyps

- Then have the patient close one nostril and have the patient breathe out of it and do the same for the other...are they patient?

Mouth:

Inspect lips (lip should be pink NOT dusky or blue/cyanotic or cracked, and free from lesions

Inspect the inside of the mouth:

- Color of mucous membranes and gums should be pink and shiny. The teeth should be white and free from cavities. Note:³ any broken or loose teeth too.

Inspect tongue:

- Should be moist and pink (NOT dry or cracked or beefy red (pernicious anemia)
- Underneath the tongue should be no lesions or sores

Inspect hard and soft palate and tonsils (no exudate on tonsils) and uvula should be midline



Neck:

Inspect the trachea:

- Is it midline, are there any lesions, lumps (goiter), or enlarged lymph nodes (have patients extend the neck up so you can access it better)?⁴

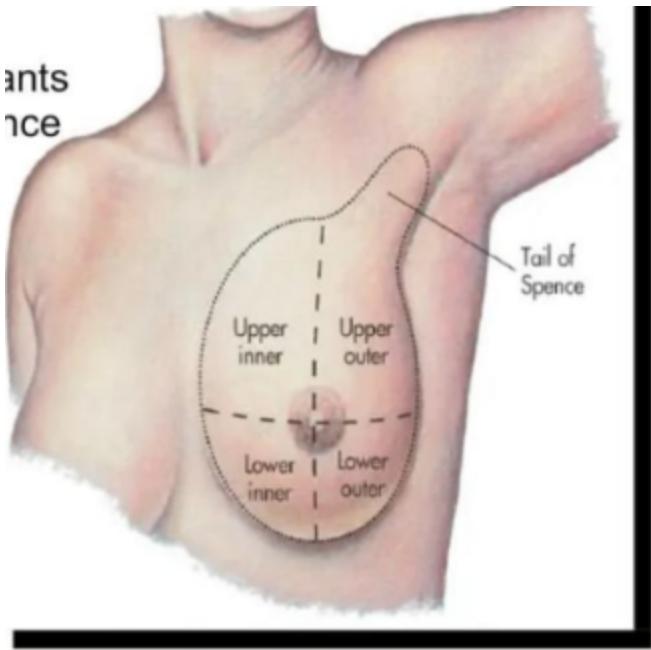


Inspect for jugular vein distention

- Place the patient in supine position at 45 degree angle and have them turn the head to the side and note any enlargement of the jugular vein.

3. Anterior and Posterior Thorax (Breast & Axillae, Thorax, Lungs and Heart)

- If the client performs breast self examination and techniques used
Assessing the Breasts and Axilla
- Inspect the breast size, symmetry and contour or shape while the client is in a sitting position
- Inspect the skin of the breast for localized discolorations or hyperpigmentation, retraction or dimpling, localized hypervascular areas, swelling or edema



- Emphasize any retraction
- Inspect the areola area for size, shape, symmetry, color, surface characteristics and any masses or lesions
- Inspect nipple size, shape, position, color, discharge, and lesions
- Palpate the axillary, subclavicular, supraclavicular lymph nodes
- Palpate the breast for masses, tenderness, and any discharge from the nipples
- Palpation of the breast is generally performed while the client is supine
- 3 patterns for palpation: hands-of-the-clock or spokes-on-a-wheel, concentric circles, vertical stripes pattern



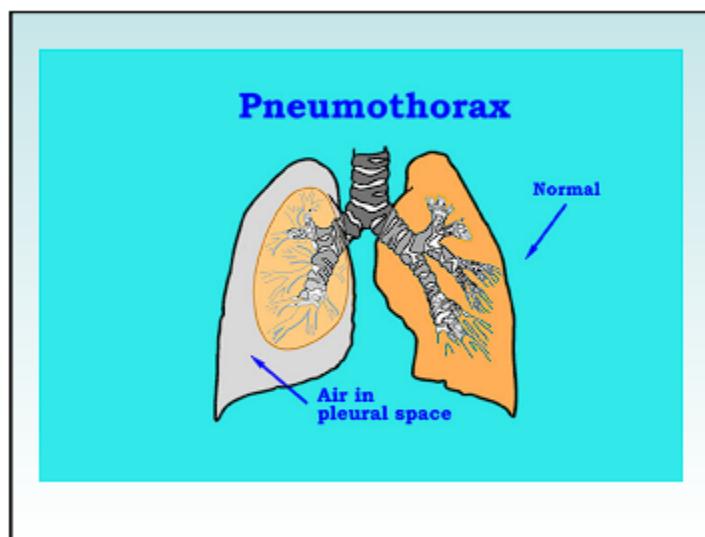
Assessment

- Inquire if the client has a history of breast masses and what was done about them
 - Pain or tenderness in the breasts and relation to the woman's menstrual cycle
 - Discharge from the nipple
 - Medication history
 - Risk factors that may be associated with development of breast cancer¹

Lungs

- **Assessment:**

- **Inspection (Posterior Thorax):**
 - Shape and Configuration:
 - Symmetry
 - Spinal alignment (straight)
 - Scapulae symmetry
 - Ratio of anterior-posterior (AP) diameter to transverse diameter (Normal: 1:2 or 5:7)
 - Ribs sloping downward
 - Muscles (developed for age/sex)
 - Skin (intact, color appropriate)

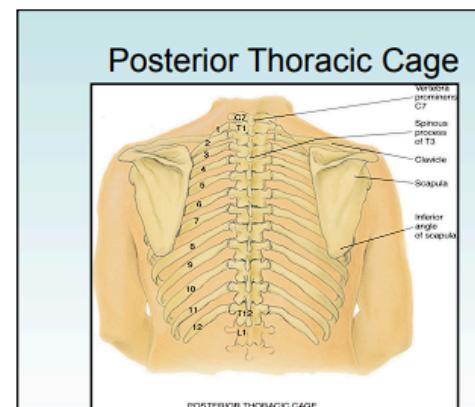
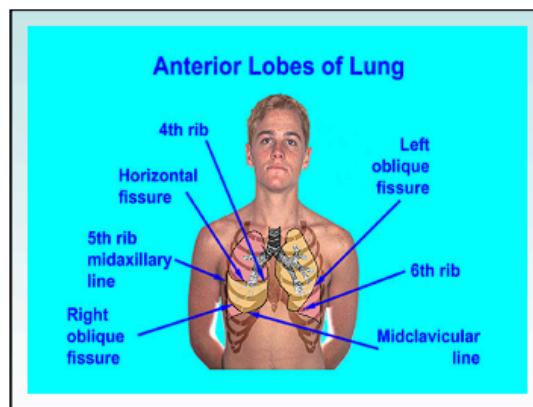


- **Respirations:**
 - Rate (Normal: 10-20 breaths/min, regular, relaxed, effortless)

- Pattern (e.g., Cheyne-Stokes, Kussmaul, Bradypnea, Tachypnea, Hyperpnea, Hyperventilation, Sighing, Air trapping)
- Use of accessory muscles

○ **Palpation (Posterior Thorax):**

- Symmetry of Chest Expansion:
 - Place hands on posterior chest wall with thumbs at T9 or T10.
 - Pinch up a small fold of skin between thumbs.
 - Ask patient to take a deep breath.
 - Observe thumbs move apart symmetrically (normal: 3-5 cm).
- Tactile (Vocal) Fremitus:
 - Palpate with palmar base of fingers or ulnar edge of hand.
 - Ask patient to repeat "99" or "blue moon."
 - Assess for symmetry (vibrations should feel equal bilaterally).
 - Fremitus is loudest between scapulae and around sternum, decreasing as you move down.
 - Increased fremitus: Consolidation (e.g., pneumonia).
 - Decreased fremitus: Obstruction (e.g., pleural effusion, pneumothorax, emphysema).
- Palpate entire posterior chest for tenderness, temperature, moisture, lumps, or masses.



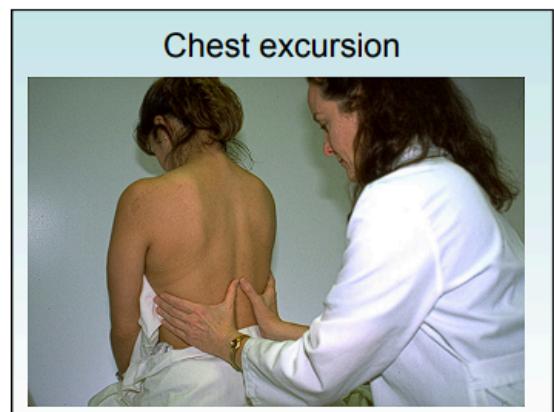
○ **Percussion (Posterior Thorax):**

- Technique: Use indirect percussion, striking the distal interphalangeal joint.
- Locations: Percuss at 2-inch intervals, comparing side to side.
- Sounds:
 - Resonance: Low-pitched, clear, hollow sound over healthy lung tissue.

- Hyperresonance: Lower-pitched, booming sound (e.g., emphysema, pneumothorax).
 - Dullness: Soft, muffled thud (e.g., pneumonia, pleural effusion, tumor).
- Diaphragmatic Excursion:
 - Determine lung border during full expiration and full inspiration.
 - Ask patient to exhale and hold, percuss down scapular line until dullness. Mark.
 - Ask patient to inhale and hold, percuss down from first mark until dullness. Mark.
 - Measure the distance between the two marks (normal: 3-5 cm, 7-8 cm in athletes).
- Auscultation (Posterior Thorax):
 - Use the diaphragm of the stethoscope directly on the skin.
 - Listen to one full respiration at each site.
 - Compare side to side.
 - Locations: From apices (C7) to bases (T10), and laterally from axilla down to T7 or T8.
 - Normal Breath Sounds:
 - Bronchial (Tracheal): High pitch, loud amplitude, inspiration < expiration, harsh/hollow tubular, over trachea and larynx.
 - Bronchovesicular: Moderate pitch/amplitude, inspiration = expiration, mixed quality, over major bronchi (sternum, between scapulae).
 - Vesicular: Low pitch, soft amplitude, inspiration > expiration, rustling, over peripheral lung fields.
 - Adventitious Sounds (Abnormal):
 - Crackles (Rales): Fine, short, crackling sounds; not cleared by cough (e.g., pneumonia, heart failure).
 - Wheeze: High-pitched, musical squeaking sound (e.g., asthma, bronchitis).
 - Rhonchi: Low-pitched, snoring, rattling sounds; may clear with cough (e.g., bronchitis).
 - Stridor: High-pitched, inspiratory crowing sound (upper airway obstruction).
 - Pleural Friction Rub: Superficial, coarse, grating sound (pleuritis).
 - Voice Sounds (Auscultate if adventitious sounds are present):
 - Bronchophony: Ask patient to say "99." Normal: muffled. Abnormal: clear "99."
 - Egophony: Ask patient to say "ee-ee-ee." Normal: "ee-ee-ee." Abnormal: "aa-aa-aa."
 - Whispered Pectoriloquy: Ask patient to whisper "1-2-3." Normal: faint/muffled. Abnormal: clear "1-2-3."

- **Inspection (Anterior Thorax):**

- Shape and Configuration:
 - AP to transverse diameter (normal 1:2)
 - Costal angle (normal <90 degrees)
 - Neck muscles, accessory muscles (normal: no use)
- Respirations:
 - Rate, pattern, effort
 - Facial expression (relaxed)
 - Level of consciousness (alert)
 - Skin color, condition (no cyanosis or pallor)
 - Symmetric chest expansion
- **Palpation (Anterior Thorax):**
 - Symmetric Chest Expansion: Place hands on anterolateral chest wall with thumbs along costal margin, pointing toward xiphoid process. Ask patient to take a deep breath. Thumbs should move apart symmetrically.
 - Tactile Fremitus: Palpate over lung apices in supraclavicular areas and down to 5th intercostal space.
 - Palpate entire anterior chest for tenderness, temperature, moisture, lumps, masses.
- **Percussion (Anterior Thorax):**
 - Locations: From apices (above clavicles) to 6th rib, comparing side to side.
 - Normal: Resonance over lung fields.
 - Dullness: Over heart, liver (right side), spleen (left side).
 - Tympany: Over stomach (left side).



- **Auscultation (Anterior Thorax):**

- Locations: From apices to 6th rib, comparing side to side.
- Normal breath sounds.
- Adventitious sounds (if present).

Sound	Duration of inspiration and expiration	Sound Diagram
Vesicular	Inspiration > Expiration 2.5 : 1	
Bronchovesicular	Inspiration = Expiration 1 : 1	
Bronchial (tubular)	Inspiration < Expiration 1 : 2	

Close inspection of the chest

Scars:

- **Thoracotomy** – *minimally invasive valve surgery*
- **Sternotomy** – *CABG / valve surgery*
- **Clavicular** – *pacemaker (can be either side, so remember to check both)*
- **Left mid-axillary line** – *subcutaneous implantable cardioverter defibrillator (ICD)*
- **Chest wall deformities** – *pectus excavatum / pectus carinatum*
- **Visible pulsations** – *forceful apex beat may be visible – hypertension/ventricular hypertrophy*

Palpation

Apex beat:

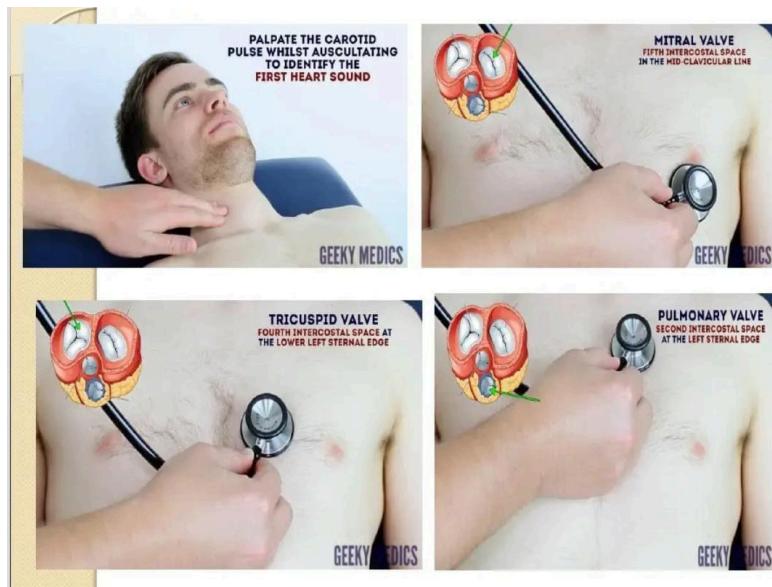
- Located at the 5th intercostal space / midclavicular line
- Palpate the apex beat with your fingers (placed horizontally across the chest)
- Lateral displacement suggests cardiomegaly

Heaves:

- A parasternal heave is a precordial impulse that can be palpated
- Parasternal heaves are present in patients with right ventricular hypertrophy
- Place the heel of your hand parallel to the left sternal edge (fingers vertical) to palpate for heaves
- If heaves are present you should feel the heel of your hand being lifted with each systole

Thrills:

- A thrill is a palpable vibration caused by turbulent blood flow through a heart valve (the thrill is a palpable murmur)
- You should assess for a thrill across each of the heart valves in turn
- To do this place your hand horizontally across the chest wall, with the flats of your fingers and palm over the valve to be assessed



Auscultation

Auscultate the four valves

A systematic routine will ensure you remember all the steps whilst giving you several chances to listen at each valve area. Your routine should avoid excess repetition whilst each step should 'build' upon the information gathered by the previous steps.

1. Palpate the **carotid pulse** to determine the first heart sound.
2. Auscultate 'upwards' through the valve areas using the diaphragm of the stethoscope:
 - **Mitral valve** – 5th intercostal space – *midclavicular line (apex beat)*
 - **Tricuspid valve** – 4th or 5th intercostal space – *lower left sternal edge*
 - **Pulmonary valve** – 2nd intercostal space – *left sternal edge*
 - **Aortic valve** – 2nd intercostal space – *right sternal edge*
3. Repeat auscultation across the four valves with the **bell** of the stethoscope.
4. Auscultate the carotid arteries with the patient holding their breath to check for radiation of an aortic stenosis murmur (*this is known as an accentuation manoeuvre*).
5. Sit the patient forwards and auscultate over the aortic area during expiration to listen for the murmur of aortic regurgitation (*this is known as an accentuation manoeuvre*).
6. Roll the patient onto their left side and listen over the mitral area with the bell during expiration for mitral murmurs (regurgitation/stenosis).

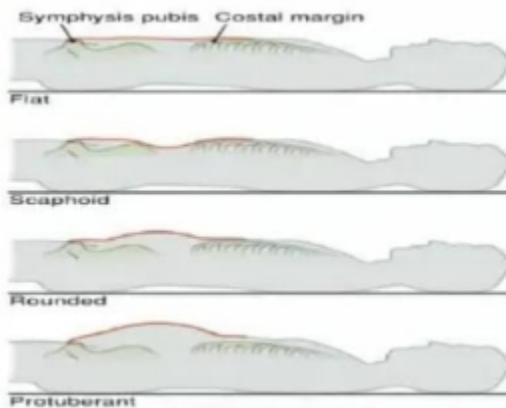


4. Abdomen

Liver Palpation

Bimanual Palpation of the Liver

- Stand at the client's right side.
- Place left hand under the client's back (11th–12th ribs).
- Fingertips should point toward the client's head.
- Ask the client to breathe deeply and press during inhalation.



Hooking Palpation of the Liver

- Hook your fingers under the right costal margin.
- Ask the client to take a deep breath.

Findings

- **Normal:** Not palpable
- **Abnormal:**
 - Hard, firm liver (suggests cancer)
 - Tenderness (suggests hepatitis, abscess)

- Liver more than 1–3 cm below the costal margin (enlarged)

Spleen Palpation

- Same method as liver palpation (bimanual), on the **left side** of the abdomen.

Findings

- **Normal:** Not palpable
- **Abnormal:**
 - Enlarged spleen
 - **Note:** Be careful to palpate to avoid trauma

Palpate the Urinary Bladder

- Palpate the suprapubic area.

Bimanual palpation of the liver



Hooking palpation of the liver



Palpate the Urinary Bladder



Special Tests for Appendicitis

- Rebound tenderness

Assessment of the Abdomen

Inspect for:

- Color of the skin
- Vascularity
- Striae (stretch marks)
- Scars
- Lesions and rashes
- Umbilicus
- Abdominal contour:
 - Flat
 - Scaphoid
 - Rounded
 - Distended

Findings

- **Normal:**
 - Soft clicks and gurgles: 5–30 per minute
 - Borborygmi (hyperactive sounds) may be normally heard
- **Abnormal:**
 - **Hypoactive sounds:** Diminished bowel motility
 - **Hyperactive sounds:** Increased bowel motility
 - **Absent bowel sounds:** No motility, requires immediate referral

Auscultation of Bowel Sounds

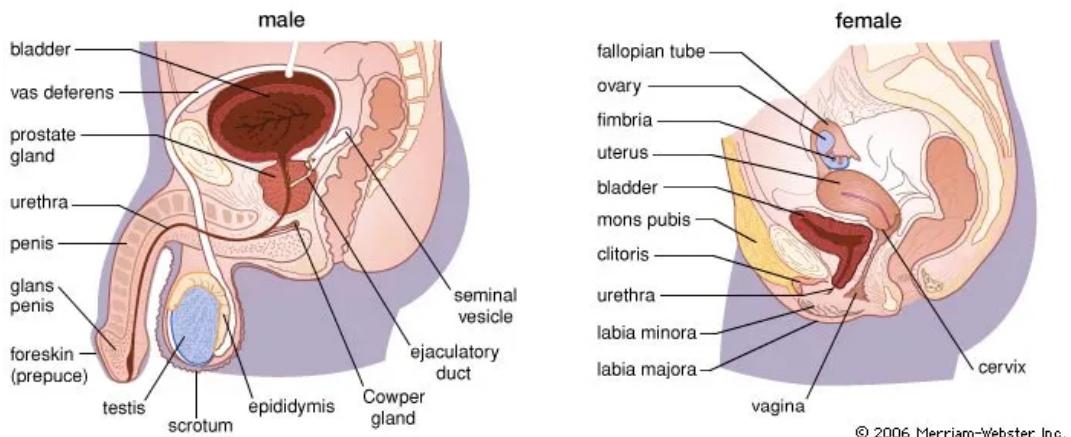
- Use the **diaphragm** of the stethoscope.

- Apply light pressure.
- Begin at **RLQ (Right Lower Quadrant)** → go clockwise.

5. Male and Female Genitalia

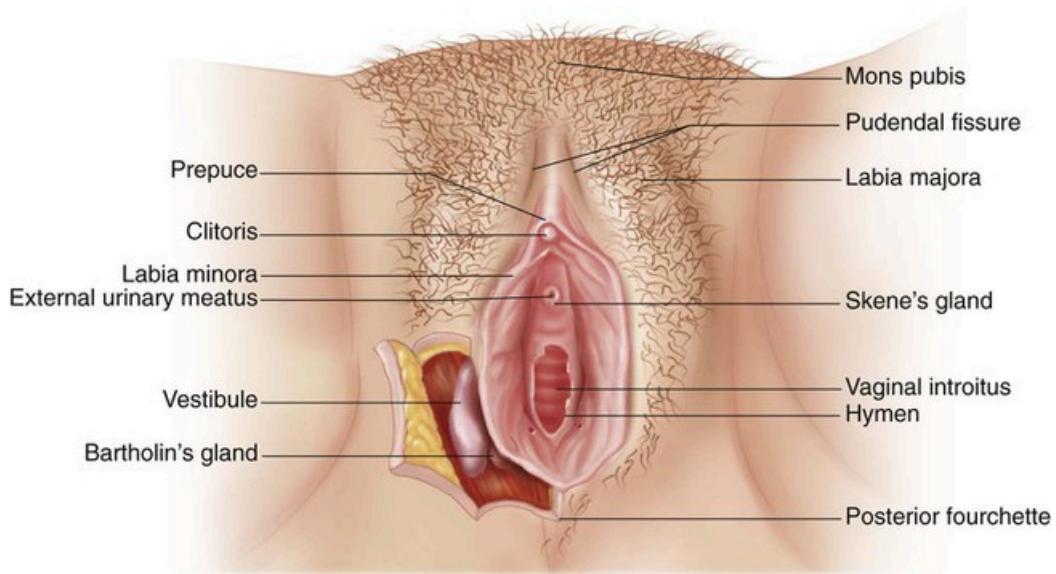
Inspection

- **Skin and Pubic Hair:**
 - Observe the distribution, color, and texture of pubic hair. Note any signs of infestations (e.g., lice, nits) or unusual hair loss patterns.
 - Inspect the skin of the entire area for lesions, rashes, excoriations (skin abrasions from scratching), discoloration, or signs of inflammation.



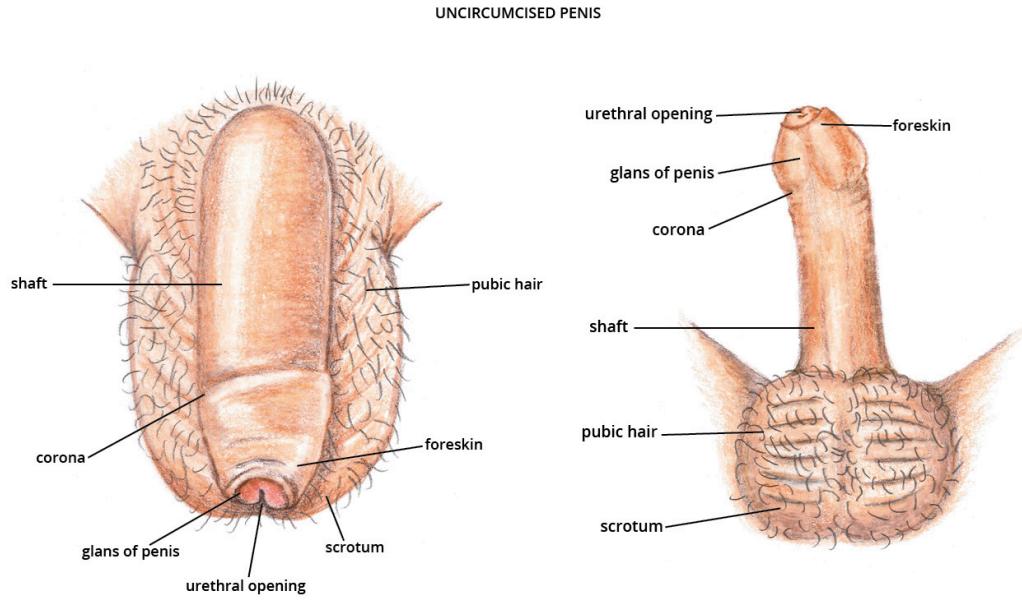
For Female Patients:

- **Positioning:** Typically, the patient is in a lithotomy position (supine with hips and knees flexed and thighs abducted).
- **Labia Majora:** Inspect for symmetry, size, color, swelling, lesions (e.g., ulcers, warts, cysts), or excoriation. Note any discharge.
- **Labia Minora:** Retract the labia majora gently to visualize the labia minora. Observe their color, symmetry, size, and presence of any lesions or adhesions.
- **Clitoris:** Inspect for size, color, and any lesions. Note if there is any clitoral enlargement (clitoromegaly).
- **Urethral Meatus:** Locate the urethral opening. Observe its position, color, and any signs of discharge, inflammation, or lesions (e.g., polyps).
- **Vaginal Opening (Introitus):** Inspect for discharge, lesions, inflammation, or signs of prolapse (e.g., cystocele, rectocele). Note the condition of the perineum.
- **Bartholin's and Skene's Glands:** Look for swelling, redness, or discharge around these gland openings.



For Male Patients:

- **Positioning:** Patient can be standing or supine, depending on comfort and what needs to be assessed.
- **Penis:**
 - **Shaft:** Inspect the skin for lesions, rashes, sores, or any abnormal curvature.
 - **Foreskin (if uncircumcised):** Gently retract the foreskin to inspect the glans. Note if retraction is easy and if there's any discharge or inflammation underneath (balanitis). If uncircumcised, ensure the patient can easily return the foreskin to its natural position to prevent paraphimosis.
 - **Glans:** Inspect for lesions, ulcers, warts, discoloration, or discharge.
 - **Urethral Opening (Meatus):** Observe its position (normally at the tip of the glans). Note any discharge, inflammation, or strictures.



- **Scrotum:**

- Inspect the scrotal skin for rashes, lesions, swelling, or discoloration. The left testis usually hangs lower than the right.
- Note any visible masses or asymmetry.
- Look for visible veins (varicocele).

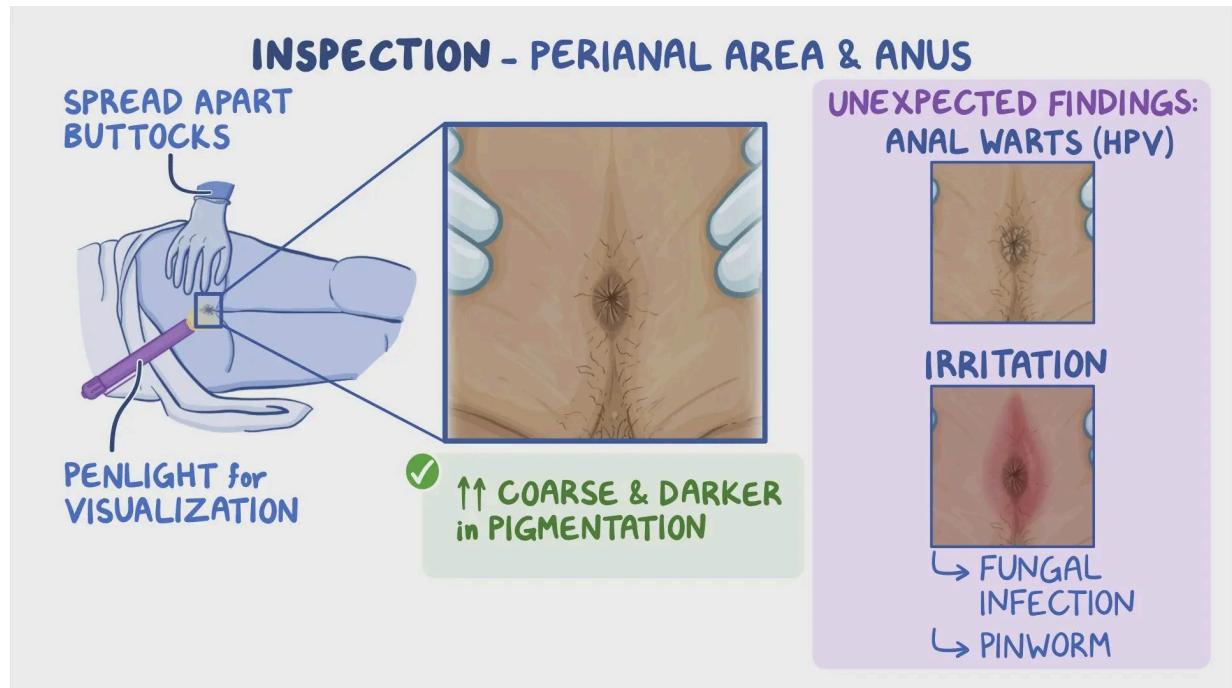
6. Rectum and Anus

Inspection

What to Observe:

- **Skin and Perianal Area:**

- **Color:** Note the general skin tone and any discoloration.
- **Integrity:** Look for any breaks in the skin, excoriations (scratches), or signs of irritation.
- **Lesions:** Inspect for any external masses, lumps, skin tags, warts (condyloma), fissures (linear cracks, often painful), fistulas (abnormal openings), or hemorrhoids (dilated veins).
- **Inflammation/Redness:** Note any signs of inflammation, redness, or tenderness.



- **Anus and Anal Opening:**

- **Position:** Observe the general position and appearance of the anus.
- **Tone:** Note if the anal opening appears relaxed or spastic.
- **Hemorrhoids/Prolapse:** Ask the patient to bear down (Valsalva maneuver) as if having a bowel movement. This maneuver can make internal hemorrhoids or rectal prolapse more apparent. Observe for any bulging, protrusion, or changes in the anal opening.
- **Hygiene:** Assess the general cleanliness of the area.

Palpation

Technique and What to Assess:

- **Introduction:** Inform the patient that you will now proceed with internal palpation and that they may feel a sensation of needing to defecate, but they should try to relax.
- **Insertion:**
 - Gently place the tip of your well-lubricated index finger against the anal verge.
 - Apply gentle, constant pressure in the direction of the umbilicus (belly button) as the patient relaxes their anal sphincter. Wait for the sphincter to relax, then slowly insert your finger fully into the rectum.
- **Rectal Sphincter Tone:**
 - Once your finger is inserted, assess the muscular tone of the anal sphincter by asking the patient to tighten around your finger. A normal sphincter should have good, even

tone and be able to contract voluntarily. Weakness or spasticity can indicate neurological issues, past trauma, or other conditions.

- **Rectal Walls:**

- Rotate your finger 360 degrees to systematically palpate all surfaces of the rectal wall: anteriorly, posteriorly, and laterally.
- Feel for any masses, polyps, tenderness, nodules, or irregularities. Note their size, shape, consistency, and mobility.
- **Anteriorly (for males):** Palpate the **prostate gland**. Note its size (normally walnut-sized), shape (heart-shaped), consistency (firm, rubbery), and presence of any nodules or tenderness. Gently sweep your finger over the seminal vesicles if palpable.
- **Anteriorly (for females):** Palpate the **cervix and uterus** if within reach, noting their position and any tenderness or masses. This is often better assessed during a bimanual pelvic exam.

7. Extremities (Musculoskeletal and Peripheral Vascular Systems)

Inspection

What to Observe:

- **Size and Contour:**

- Compare both sides (e.g., right arm vs. left arm, right leg vs. left leg) for **bilateral symmetry**. Are the limbs roughly equal in size and shape?
- Note any obvious muscle atrophy (wasting) or hypertrophy (enlargement).
- Observe joint prominences and ensure they appear normal.

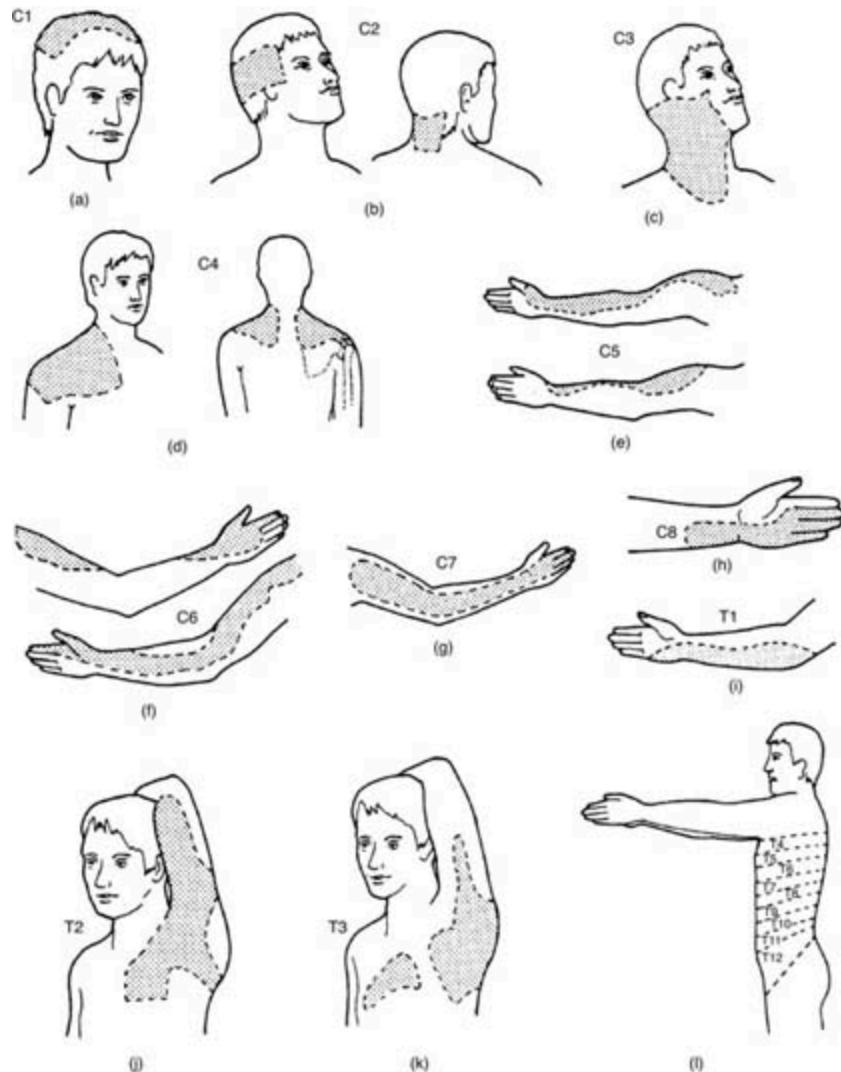
- **Deformities:** Look for any abnormal angulation, swelling, subluxation (partial dislocation), or dislocation of joints or bones.

- **Edema (Swelling):** Check for generalized or localized swelling. Note if it's pitting (leaves an indentation when pressed) or non-pitting. Assess its distribution.

- **Involuntary Movements:** Observe for tremors, tics, fasciculations (muscle twitches), or other uncontrolled movements.

- **Skin and Soft Tissues:**

- Look for signs of trauma such as **bruising (ecchymosis)**, lacerations, abrasions, or **discoloration**.
- Note any redness, warmth, or shiny skin over joints, which could indicate inflammation.
- Observe any scars, rashes, or other lesions.



Normal Findings for Musculoskeletal Inspection:

- Both extremities are **equal in size and have symmetrical contours**, with visible joint prominences that appear normal.
- There are **no involuntary movements or edema**.
- Skin color is uniform, and there are no signs of trauma, lesions, or inflammation.

Palpation

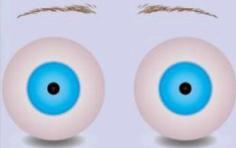
What to Palpate and Assess:

- **Temperature:** Gently feel the skin over the extremities with the back of your hand. Check for **uniform temperature** across all limbs and compare corresponding areas bilaterally. Note any localized warmth or coolness.
- **Muscle Tone:**
 - Assess muscle consistency—should feel firm but not rigid.

- Test for resistance to passive movement.
- For example, have the client **squeeze your fingers** and compare the strength of the grip on both sides. This gives an initial impression of general upper extremity muscle strength.
- **Tenderness:** Gently palpate along muscles, bones, and joints. Note any localized pain or tenderness.
- **Crepitus:** As you move joints through their range of motion, feel for any **crepitus** (a crackling, grating, or popping sensation or sound) that may indicate friction within the joint.
- **Muscle Strength:**
 - **Range of Motion (ROM) Exercises:** Ask the patient to actively move each joint through its full range of motion (e.g., flexion, extension, abduction, adduction, rotation). Observe for limitations, pain, or instability. If active ROM is limited, gently move the joint passively to determine the extent of the limitation.
 - **Resistance Testing:** Evaluate muscle strength by testing against gravity and your applied resistance. This is documented using a standard grading scale, such as the Lovett Scale.

8. Neurological System Assessment

A comprehensive neurological assessment evaluates the intricate functions of the brain, spinal cord, and peripheral nerves. Changes in these functions can provide crucial insights into a patient's neurological health.

Behaviour	Response
	<p>Eye Opening Response</p> <ol style="list-style-type: none"> 4. Spontaneously 3. To speech 2. To pain 1. No response
	<p>Verbal Response</p> <ol style="list-style-type: none"> 5. Oriented to time, person and place 4. Confused 3. Inappropriate words 2. Incomprehensible sounds 1. No response
	<p>Motor Response</p> <ol style="list-style-type: none"> 6. Obeys command 5. Moves to localised pain 4. Flex to withdraw from pain 3. Abnormal flexion 2. Abnormal extension 1. No response

Mental Status

Begin by assessing the fundamental aspects of cognitive function:

- **Level of Consciousness (LOC):** Determine if the client is awake, alert, and responsive. Note if they are drowsy, lethargic, or comatose.
- **Orientation:** Assess the client's awareness of:
 - **Person:** "What is your name?" "**Who am I?**"
 - **Place:** "Where are you right now?"
 - **Time:** "What is today's date/day of the week/time of day?"
- **Memory Function:** Evaluate both recent and remote memory:
 - **Recent Memory:** Ask about events that occurred recently (e.g., "What did you eat for breakfast?").
 - **Remote Memory:** Inquire about well-known past events (e.g., "When is your birthday?" or historical facts).

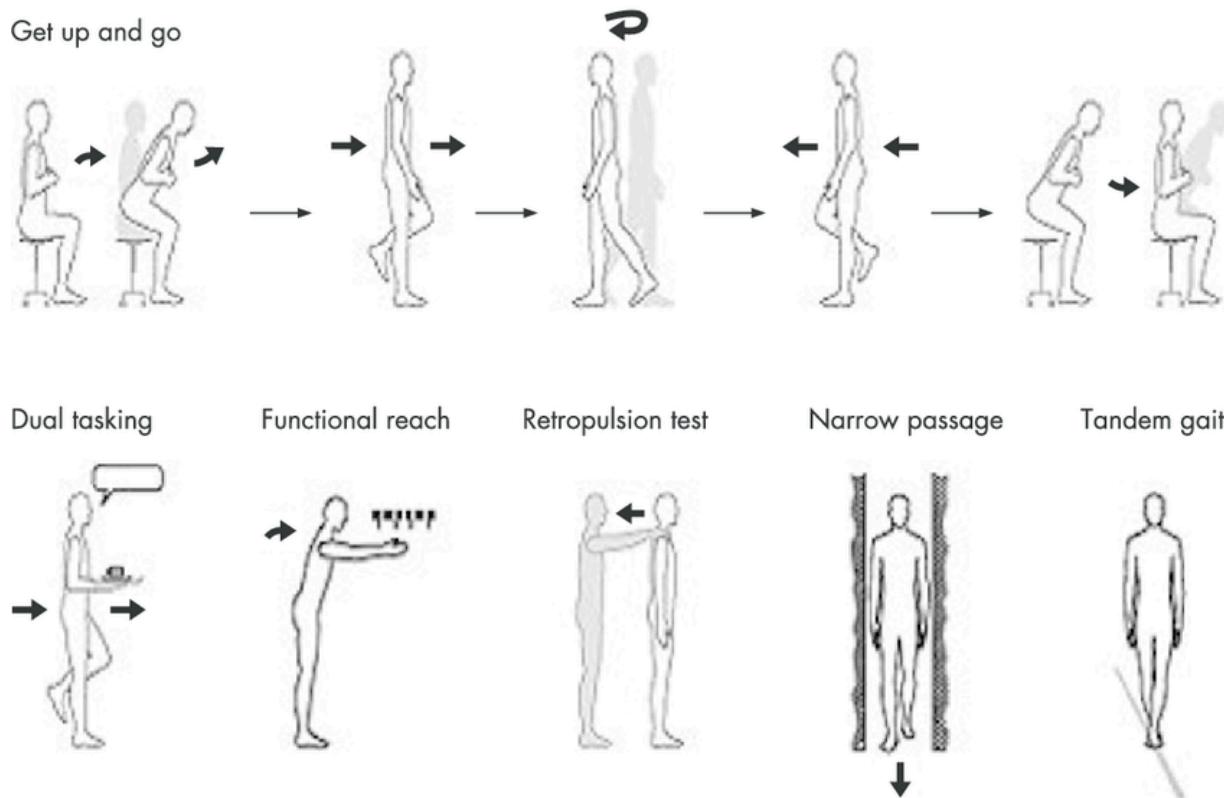


Balance and Gait

Assess coordination and stability during movement.

- **Balance (Romberg Test):**
 - Ask the client to stand with their feet together, arms at their sides.
 - First, observe their posture with **eyes open** for 20-30 seconds.
 - Then, ask them to **close their eyes** and continue to stand for 20-30 seconds.
 - Observe for any significant swaying or loss of balance. Minimal swaying is normal; significant swaying or falling indicates a positive Romberg sign, suggesting a balance issue.
- **Gait (Walking Pattern):**
 - **Normal Gait:** Observe the client walking across the room in their typical manner. Note their posture, arm swing, stride length, and overall coordination.

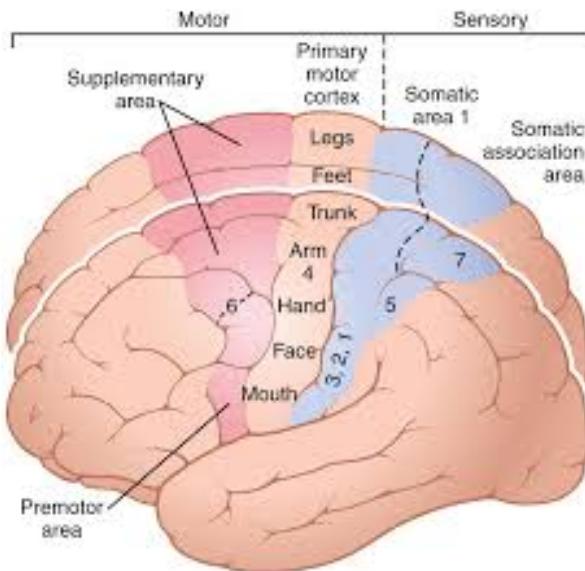
- **Heel-to-Toe Walk (Tandem Gait):** Ask the client to walk in a straight line, placing the heel of one foot directly in front of the toes of the other foot. This maneuver further challenges balance and coordination.



Motor Function

Evaluate the strength, symmetry, and control of muscle movements.

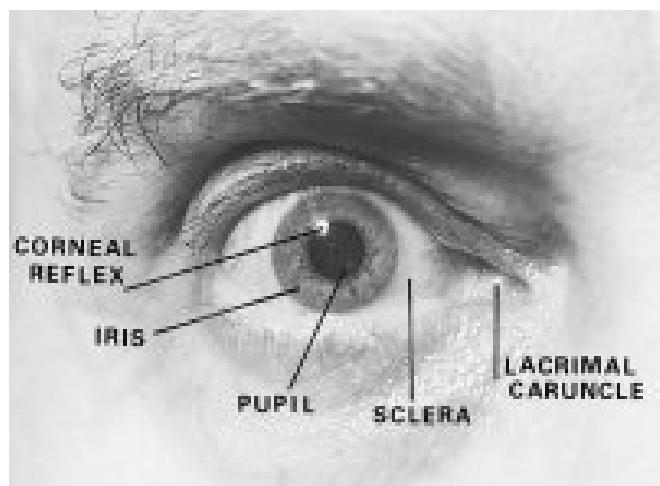
- **Gross Motor Function:** Assesses large muscle group movements.
 - Ask the client to perform symmetrical movements against resistance (e.g., pushing/pulling with arms, pushing/pulling with legs).
 - Observe for **symmetry** in strength and movement between corresponding limbs (e.g., right vs. left arm, right vs. left leg).
- **Fine Motor Function:** Assesses precision and dexterity using smaller muscle groups.
 - **Hands:** Have the client manipulate small objects (e.g., picking up a coin, buttoning a shirt, opposition of thumb to each finger).
 - **Feet:** Observe their ability to manipulate small objects with their toes (if applicable and safe).

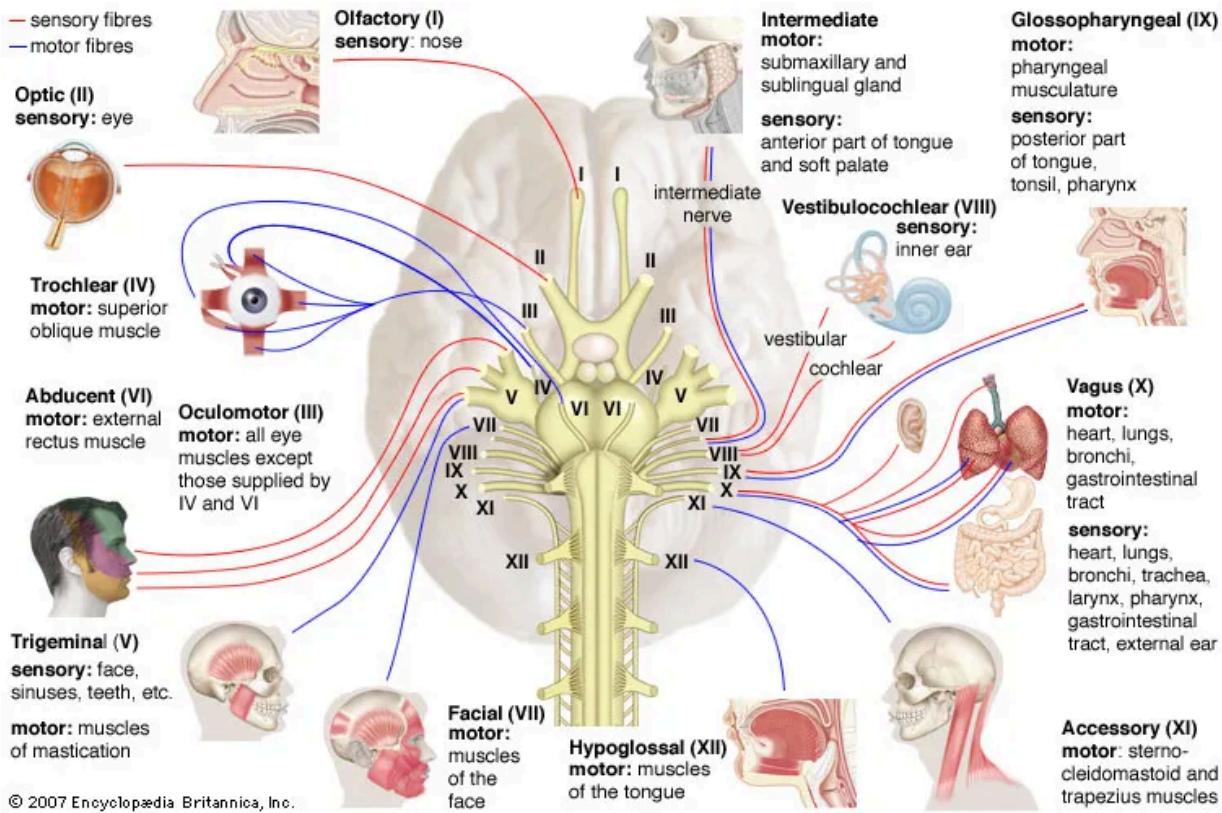


Sensory Function

Assess the client's ability to perceive various stimuli. This is always performed with the client's **eyes closed** to ensure reliance solely on sensory input.

- **Light Touch:** Use a soft object (e.g., cotton wisp, blunt end of a pen cap) to lightly touch different areas of the body (face, arms, hands, legs, feet) bilaterally. Ask the client to state "yes" when they feel the sensation and to point to the location.
- **Temperature Perception:** Use warm and cold objects (e.g., warm and cool test tubes) and touch different body parts. Ask the client to identify the sensation as "hot," "cold," or "nothing."
- **Pain Perception (Superficial):** Use a sharp/dull distinction (e.g., broken tongue depressor or a safety pin, *never a sharp point that could break the skin*) to lightly touch various areas. Ask the client to distinguish between "sharp" and "dull."
- **Kinesthetic Sense (Position Sense):** This assesses the awareness of body position and movement without visual input.
 - Grasp the client's finger or toe by the sides.
 - Move the digit up or down, and then ask the client to describe its position while their eyes remain closed.





Glasgow Coma Scale (GCS)

The GCS is a standardized, objective tool used by healthcare professionals to consistently evaluate a patient's **level of consciousness (LOC)**. It provides a numerical score based on the patient's best response in three specific areas of behavior: **eye opening, verbal response, and motor response**.

Glasgow Coma Scale (GCS) Table:

Category	Response	Score
Eye Opening (E)	Spontaneous	4
	To speech (responds to spoken word)	3

	To pain (e.g., sternal rub)	2
	No response	1
Verbal Response (V)	Oriented (to person, place, time)	5
	Confused (converses but disoriented)	4
	Inappropriate words	3
	Incomprehensible sounds	2
	No response	1
Motor Response (M)	Obeys commands	6
	Localizes to pain (moves to remove painful stimulus)	5
	Withdraws from pain (flexes away from pain)	4
	Abnormal flexion (Decorticate posturing)	3
	Abnormal extension (Decerebrate posturing)	2

	No response	1
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Scoring:

- **Total Score = E + V + M**
- **Maximum Score: 15** (Indicates the best possible response and full consciousness).
- **Minimum Score: 3** (Indicates deep coma or death; lowest possible score).

Interpretation:

- **13–15: Mild brain injury**
- **9–12: Moderate brain injury**
- **≤ 8: Severe brain injury (coma)** – generally considered the threshold for coma.

The GCS provides a rapid and reliable method for serial assessments of neurological status, allowing healthcare providers to track changes over time and guide clinical decision-making.

ANNEXURE 1

Terms and Terminology Related to the Neurological System and Neurological Disorders

Acalculia: Refers to the loss of the client's ability to perform simple mathematical calculations such as addition and subtraction.

Agnosia: A condition in which the client loses the ability to recognize and identify familiar objects using their senses, despite intact sensory function. Types include auditory, visual, gustatory, olfactory, and tactile agnosia.

Agraphia: The inability to write. It is one of the four primary symptoms of Gerstmann's syndrome, along with acalculia, finger agnosia, and difficulty in distinguishing right from left.

Alexia: A form of receptive aphasia where the client cannot understand or read written words. Also known as word blindness or optical alexia.

Anhedonia: A neurological deficit characterized by loss of interest in life and daily experiences.

Anomia: The inability to name familiar objects or items.

Anosognosia: A condition in which the client is unaware of an affected body part, such as a paralyzed or missing limb. Similar to hemineglect and hemi-attention.

Anosodiaphoria: Describes a client's indifference to their own illness or disability.

Aphasia: Includes expressive and receptive aphasia. Expressive aphasia involves difficulty expressing thoughts verbally; receptive aphasia involves difficulty understanding spoken words.

Asomatognosia: The inability to recognize one's own body parts.

Astereognosis: The inability to distinguish textures or identify familiar objects by touch.

Asymbolia: The inability to respond to pain despite having intact sensory perception. Also called pain dissociation or pain asymbolia.

Autotopagnosia: Inability to identify body parts of oneself, others, or on a medical model.

Balint's Syndrome: Characterized by ocular apraxia, optic ataxia, and simultanagnosia, resulting in impaired visual scanning, visuospatial skills, and attention.

Boston Diagnostic Aphasia Examination: A standardized tool to evaluate the severity of aphasia by assessing perception, processing, and responses using problem-solving and comprehension.

Broca's Aphasia: Characterized by difficulty forming and expressing words, though comprehension remains intact.

Color Agnosia: Inability to recognize and name different colors.

Conduction Aphasia: The client can speak and comprehend but cannot repeat phrases or write dictated passages.

Constructional Apraxia: The inability to draw or copy simple shapes.

Dressing Apraxia: Difficulty dressing appropriately due to neurological dysfunction.

Dysgraphesthesia: Impaired ability to recognize letters or numbers traced on the skin.

Dysgraphia: Difficulty in writing, as opposed to agraphia which is a complete inability to write.

Environmental Agnosia: Inability to recognize familiar locations, such as identifying landmarks in photographs.

Finger Agnosia: Inability to identify which finger is being touched during examination.

Geographic Agnosia: Inability to recognize familiar countries or geographic locations on a map.

Gerstmann's Syndrome: Includes symptoms such as acalculia or dyscalculia, finger agnosia, right-left disorientation, and agraphia or dysgraphia.

Hemiasomatognosia: The person is unaware of one half of their body and behaves as though it does not exist.

Homonymous Hemianopsia: Neurological blindness in the same visual field of both eyes.

Ideomotor Apraxia: Inability to mimic simple actions like brushing teeth, despite understanding the task.

Misoplegia: An intense dislike or hatred for an affected limb.

Motor Alexia: The client can read aloud but cannot comprehend what is read.

Musical Alexia: Inability to recognize familiar tunes such as national or traditional songs.

Movement Agnosia: Inability to perceive or recognize the movement of objects.

Ocular Apraxia: Inability to move eyes quickly to follow a moving object.

Optic Ataxia: Difficulty reaching for or grasping objects seen visually.

Phonagnosia: Inability to recognize familiar voices.

Prosopagnosia: Inability to recognize familiar faces.

Simultanagnosia: Inability to perceive more than one object at a time within the visual field.

Somatophrenia: Denial of ownership over one's body parts, believing they belong to someone else.

Two-Point Discrimination Test: Assesses the ability to recognize two distinct sensory stimuli at once, such as pain and touch.

Visual Agnosia: Inability to recognize familiar objects visually.

Wechsler Memory Scale IV: A standardized tool to assess different aspects of memory including verbal, visual, immediate, delayed, auditory, and working memory.

ANNEXURE 2
SAMPLE HEALTH ASSESSMENT FORMAT (Adult)

Demographic Information:

1. Name
2. Age
3. Sex
4. Contact information

Medical History:

1. Current medical conditions
2. Past medical conditions
3. Allergies
4. Medications

Lifestyle Assessment:

1. Diet
2. Physical activity
3. Smoking status
4. Alcohol consumption

Physical Examination:

1. Vital signs (BP, HR, RR, Temp)
2. Height and weight

3. Body mass index (BMI)
4. Waist circumference
5. General appearance

Systems Review:

1. Cardiovascular
2. Respiratory
3. Gastrointestinal
4. Musculoskeletal
5. Neurological

Health Risk Assessment:

1. Family history
2. Lifestyle risks (smoking, physical inactivity, etc.)
3. Medical risks (hypertension, diabetes, etc.)

Functional Assessment:

1. Activities of daily living (ADLs)
2. Instrumental activities of daily living (IADLs)

Mental Health Assessment:

1. Mood
2. Anxiety
3. Cognitive function

Plan:

1. Health promotion
2. Disease prevention
3. Treatment plan

Role of Nurses in Health Assessment

- Conduct comprehensive assessments: Gather information about patients' physical, emotional, and social health.
- Collect data: Obtain vital signs, medical history, and other relevant information.
- Observe and document: Record observations, symptoms, and changes in patient condition.
- Identify health risks: Recognize potential health risks and develop strategies to mitigate them.
- Develop care plans: Create individualized care plans based on assessment findings.
- Monitor and evaluate: Continuously monitor patients' conditions and evaluate the effectiveness of care plans.
- Communicate with patients and families: Educate patients and families about health conditions, treatments, and self-care.
- Collaborate with healthcare teams: Work with interdisciplinary teams to provide comprehensive care.

Nurses play a vital role in health assessment, and their contributions are essential to providing high-quality patient care.

Summary

A physical assessment is a comprehensive evaluation of a patient's physical health, involving a head-to-toe examination of various body systems. It includes vital signs, inspection, palpation, percussion, and auscultation to identify health issues, develop care plans, and monitor health status. The purpose is to detect abnormalities, diagnose conditions, and track changes in patient condition over time. By using these techniques, healthcare professionals can provide personalized care, improve patient outcomes, and enhance overall health and well-being. Physical assessment is an essential tool for healthcare professionals to deliver high-quality patient care.

CONCLUSION

Physical assessment is a vital component of healthcare, enabling professionals to identify health issues, develop care plans, and monitor patient progress. Through thorough assessments, healthcare providers can deliver high-quality, patient-centered care, improving overall health outcomes and enhancing patient well-being.

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