Physical Examination and Body Positions

Out lines:

· Introduction
· Definition
· Types
· Techniques
· Pt interview Assessment (past ,present history)
· Body Position

Introduction

Physical examination is a fundamental clinical skill and vital aspect in nursing that involves assessing a patient's physical state to gather information that can aid in diagnosis, treatment, and overall healthcare management. The examination combines observation, palpation, percussion, and auscultation to identify any potential abnormalities or health issues.

Definition :

Physical Examination:- comprehensive evaluation of the body conducted by a healthcare professional to assess the patient's physical condition. It includes inspection, palpation, percussion, and auscultation of various body systems to identify any clinical signs of disease, monitor the progression of existing conditions.

Types of examination:

- There are several types of physical examinations, each with a specific purpose and focus. Here are the primary types:

1. Comprehensive Physical Examination

A full-body examination assessing all major body systems, typically done annually or during a first-time visit. It includes vital signs, general appearance, and examination of the head, neck, chest, abdomen, musculoskeletal, and neurological systems.

2. Focused or Problem-Oriented Examination

An examination targeting specific symptoms or areas of concern, often used for acute problems. For example, if a patient presents with abdominal pain, the examination may focus on the gastrointestinal system.

Techniques of physical examinations

1.Inspection

Observation of the patient's body, posture, and overall appearance. This technique involves looking for any visible signs of abnormalities, such as skin discoloration, swelling, deformities, or unusual movements.

2.Palpation

Using hands to feel and examine body parts to assess texture, temperature, size, tenderness, and location of structures like organs, lymph nodes, or masses. For example, palpating the abdomen can reveal areas of tenderness or swelling.

Types of palpation .

1.Light Palpation

Involves gentle pressing, usually no more than 1-2 cm deep, to feel surface structures and detect tenderness, temperature, texture, or superficial masses.

2.Deep Palpation

Involves applying more pressure, typically 4-5 cm deep, to assess organs or structures deeper within the body, such as the liver or spleen.

This type of palpation is useful for identifying the size, shape, and consistency of abdominal organs.

3.Percussion

Tapping specific body parts, usually with fingers, to assess underlying structures. Percussion creates sounds that vary depending on whether the area is filled with air, fluid, or solid tissue, aiding in the assessment of organs like the lungs and abdomen.

Types of percussion

1.Direct Percussion

Involves tapping directly on the body surface with one or two fingers. Often used for assessing areas like the sinuses to check for tenderness or fluid buildup.

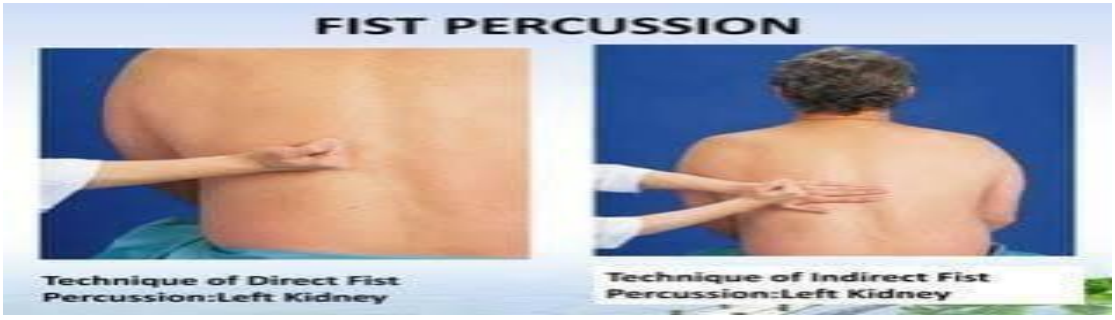
2.Indirect Percussion

The most common type, where one hand (usually the middle finger) is placed on the body surface and tapped with a finger from the other hand.

3. Fist Percussion

Involves forming a fist and gently striking it on a body part, often with one hand resting flat against the area being tested.

Typically used to assess the kidneys for tenderness, as in a kidney punch test, which can indicate.



Percussion elicits five types of sounds:

1.Flatness (dull) – bone and muscle

2.Dullness (thud like) – liver, spleen, heart

3.Resonance (hollow) – air-filled lung/ normal lung

4.Hyperresonance – emphysematous lung

5.Tympany – stomach filled with gas (air)

4. Auscultation

Listening to sounds produced within the body, often with a stethoscope. This technique is commonly used to evaluate the heart, lungs, and intestines. Abnormal sounds, such as heart murmurs or crackles in the lungs, can indicate specific health conditions.

Types of Auscultation.

1.Direct Auscultation

Involves listening to sounds without a stethoscope by placing the ear directly on the patient's body, often used in cases of assessing heart sounds in children or for localized sounds, such as checking for bowel sounds in the abdomen.

2.Indirect Auscultation

The most common method, where a stethoscope is used to amplify and isolate sounds from the body. The healthcare provider places the stethoscope on the patient's chest, back, or abdomen to listen for specific sounds, such as heartbeats, lung sounds, and bowel sounds.

1-PT's interview Assessment.

Conducting a patient interview assessment is a critical step in gathering information about a patient's health history, both past and present. This information is essential for making informed clinical decisions. Below is a structured approach to assess past and present history during a patient interview.

Definition .

✓ In nursing, a patient interview assessment is a systematic process of gathering comprehensive information from a patient about their health history, current condition, and psychosocial factors. This assessment is conducted through structured communication techniques, allowing the nurse to understand the patient's concerns, preferences, and needs.

Patient Interview Assessment

✓ Establish rapport with the patient.

✓ Explain the purpose of the interview and assure confidentiality.

2. Present History

Chief Complaint: Start by asking the patient what brought them in today. Document their main concern in their own words.

✓ History of Present Illness (HPI): Gather detailed information about the current issue:

✓ **Onset: When did the symptoms start?**

✓ **Location: Where is the issue located?**

✓ **Duration: How long have the symptoms been present?**

✓ **Characteristics: What are the symptoms like (e.g., sharp, dull,** throbbing)?

✓ **Aggravating/Alleviating Factors: What makes the symptoms worse or** better?

✓ **Radiation: Do the symptoms radiate to other areas of the body?**

✓ **Timing: Are the symptoms constant, intermittent, or do they occur at** specific times?

✓ **Severity: How severe are the symptoms on a scale of 1 to 10?**

3. Past Medical History (PMH)

✓ Previous Illnesses: Ask about any chronic conditions (e.g., diabetes, hypertension) and significant past illnesses or injuries.

✓ Surgeries: Inquire about any past surgeries and their outcomes.

✓ Hospitalizations: Record any previous hospital stays, including reasons and dates.

ü Allergies: Document any known allergies, including medications, food, and environmental factors.

✓ Medications: Ask about current medications, including prescription and over-the-counter drugs, supplements, and herbal remedies.

4. Family History

✓ Gather information about the health status of immediate family members (parents, siblings, children) to assess genetic predispositions to diseases.

✓ Ask about family history of chronic diseases (e.g., heart disease, cancer, diabetes).

5. Social History

✓ **Lifestyle Factors: Assess habits such as smoking, alcohol use, and** recreational drug use.

✓ Occupation: Inquire about the patient's job and any occupational hazards.

✓ Living Situation: Understand their living arrangements and support systems.

✓ Exercise and Diet: Ask about physical activity levels and dietary habits.

6. Review of Systems (ROS)

✓ Conduct a systematic review of all body systems to identify any additional symptoms or concerns:

✓ Constitutional: Weight loss, fatigue, fever

✓ Cardiovascular: Chest pain, palpitations

✓ Respiratory: Shortness of breath, cough Gastrointestinal: Nausea, vomiting, diarrhea

✓ Neurological: Headaches, dizziness

✓ Musculoskeletal: Joint pain, stiffness

✓ Endocrine: Heat/cold intolerance, changes in thirst

7. Conclusion

✓ Summarize the key points gathered during the interview.

✓ Provide the patient with an opportunity to ask questions or clarify any points.

✓ Discuss the next steps in the assessment or treatment plan.

Tips for Effective Patient Interviewing

✓ **Active Listening: Pay close attention to the patient's responses without** interrupting.

✓ **Open-Ended Questions: Use open-ended questions to encourage** patients to share more information.

✓ **Empathy and Support: Show empathy and understanding to build** trust and encourage open communication

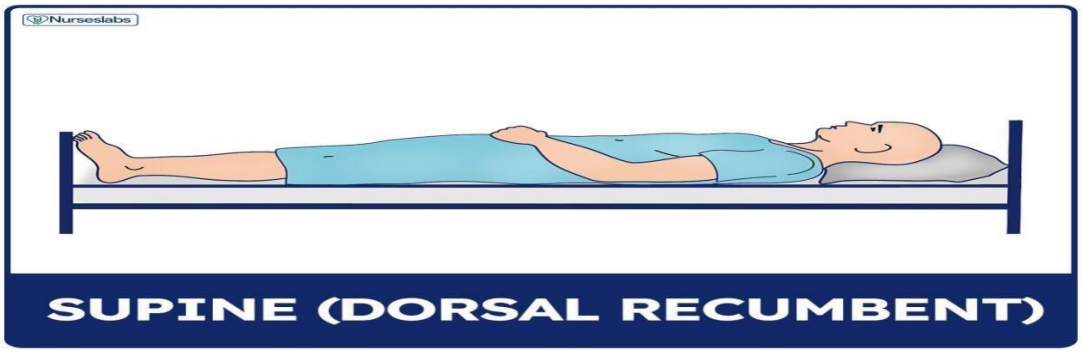
Body Position

Body positioning is essential in healthcare for various medical examinations, procedures, and patient comfort.

1. Supine Position(Dorsal recumbent)

Definition:

• The patient lies flat on their back with arms at their sides.



Radiological Investigations In This Position:

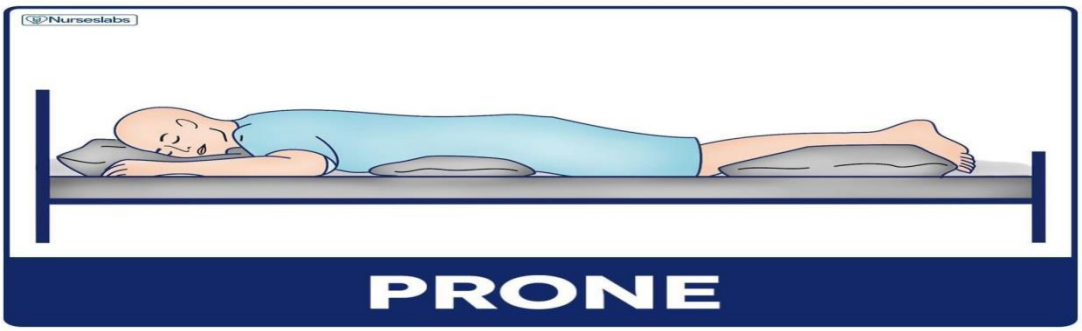
- ❖ X-ray imaging of the chest, abdomen, and pelvis.
- ❖ CT scans for abdomen, pelvis, or head.
- ❖ MRI of the brain, spine, or abdomen.

Diagnostic Procedures:

- ➢ Apical pulse assessment.
- ➢ Liver biopsy (right arm positioned as described).
- ➢ Male catheterization.
- ➢ Post-lumbar puncture observation.
- ➢ after spinal procedures.
- ➢ above-knee amputation ((With residual limb supported with pillow)) Shock ((With elevated legs))
- ➢ **Steps:**
- ➢ 1. Ensure the bed is flat.
- ➢ 2. Place the patient on their back with head, neck, and spine aligned.
- ➢ 3. Position arms comfortably at the sides.
- ➢ 4. Place a pillow under the head and possibly under the knees for lumbar support.

2. Prone Position

- ➢ **Definition:** The patient lies flat on their stomach with their head turned to one side.



Radiological Investigations:
Ø CT and MRI of the spine.
Ø PET scans for thoracic or lumbar spine issues.
Diagnostic Procedures:
Ø Posterior thoracic or spine assessments.
Ø Biopsy of spinal or paraspinal regions.
Ø during certain types of surgeries.
Ø Procedure for posterior surface of the body.
Ø Spinal and neck surgery
Ø Kidney biopsy
Ø spina bifida ((Myelomeningocele))
Ø Post tonsillectomy ((child))

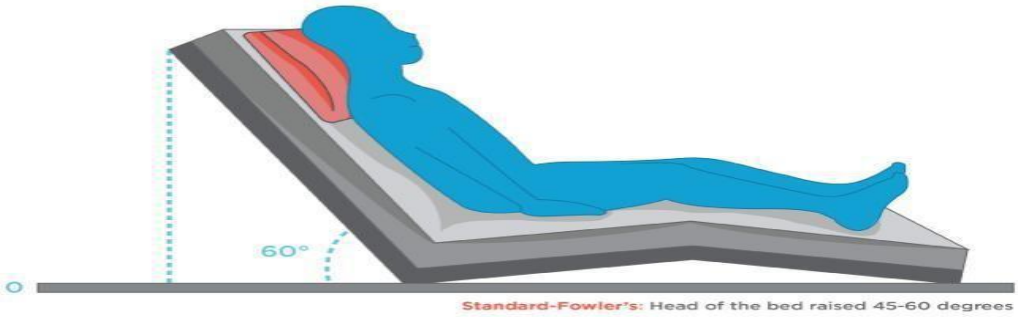
Steps.
1. Place the patient on their stomach, with their head turned to one side.
2. Align the neck and spine.
3. Position arms either at the sides or flexed alongside the head.
4. Use pillows under the abdomen and ankles to reduce strain on the lower back and feet.

3. Fowler's Position

Definition:

The patient is semi-sitting with the head of the bed elevated between 45-60 degrees.

Radiological Investigations:
Ø Chest X-ray (especially for respiratory issues).
Ø Upper abdominal ultrasound.
Diagnostic Procedures:
Ø Post-surgical recovery monitoring.
Ø Respiratory function tests (spirometry).



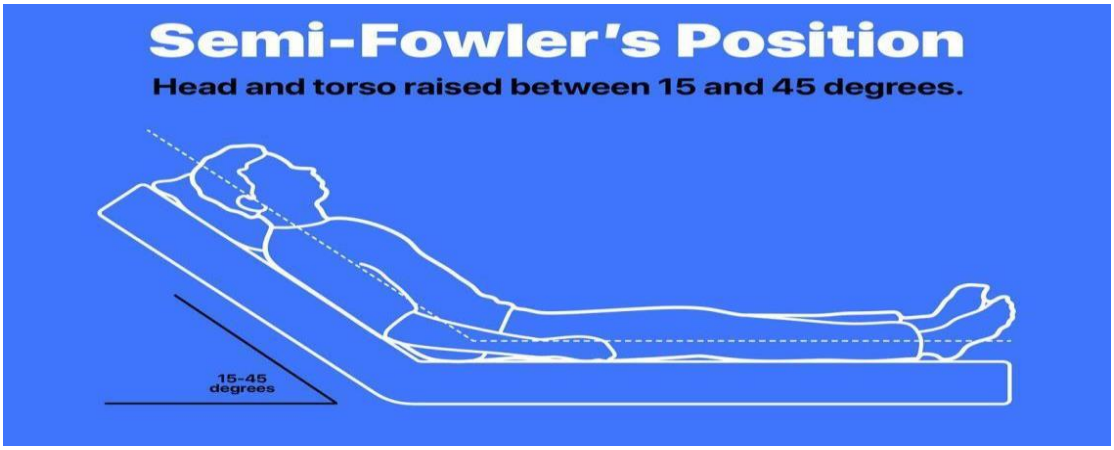
Steps:

1. Elevate the head of the bed to the desired angle (45-60 degrees).
2. Place a pillow behind the patient's head and neck for support.
3. Adjust the knees slightly to provide comfort and support circulation.
4. Ensure the spine remains aligned with minimal pressure points.

4. Semi-Fowler's Position

Definition:

A variation of Fowler's position, with the head of the bed elevated between 30-45 degrees



Radiological Investigations:

Ø Echocardiography (cardiac patients).
Ø Jugular venous pressure assessment via ultrasound.

Diagnostic Procedures:

Ø Post-craniotomy and head surgeries.
Ø Post-cataract eye examinations& Surgery
Ø Nasogastric tube Irrigation and feeding

Ø Heart failure patient with jugular vein distension
Ø Jugular vein assessment
Ø Post thyroidectomy
Ø Post laryngectomy
Ø Post bronchoscopy
Ø Mastectomy ((With the affect arm elevated on a pillow))
Ø Post appendectomy

- ❑ During chemotherapy session

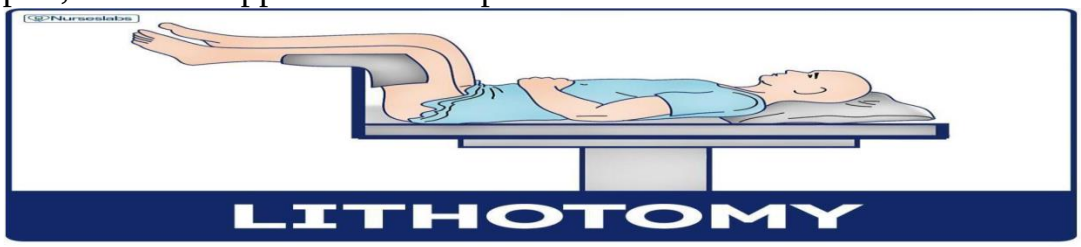
Steps:

1. Elevate the head of the bed to 30-45 degrees.
2. Place pillows under the head, arms, and possibly knees for additional support.
3. Ensure that the patient's body is aligned and comfortable.

5. Lithotomy Position

Definition:

The patient lies on their back with hips and knees flexed, thighs apart, and feet supported in stirrups.



Radiological Investigations:

Ø Pelvic ultrasound.
Ø Hysterosalpingography (HSG).

Diagnostic Procedures:

Ø gynecological exams, childbirth, and procedures involving the pelvis and lower abdomen.
Ø Perineal and vaginal procedure
Ø Urologic surgery
Ø Gynaecological procedure
Ø Pelvic surgery
Ø Colorectal surgery

- ❑ Childbirth

Steps:

1. Position the patient on their back.

2. Flex the hips and knees, spreading the thighs apart.

3. Place the feet in stirrups or a supported foot rest.

4. Adjust the position to maintain alignment and provide comfort and stability.

6. Sims' Position

Definition:

✓ The patient lies on their left side with the right hip and knee bent and left leg straight

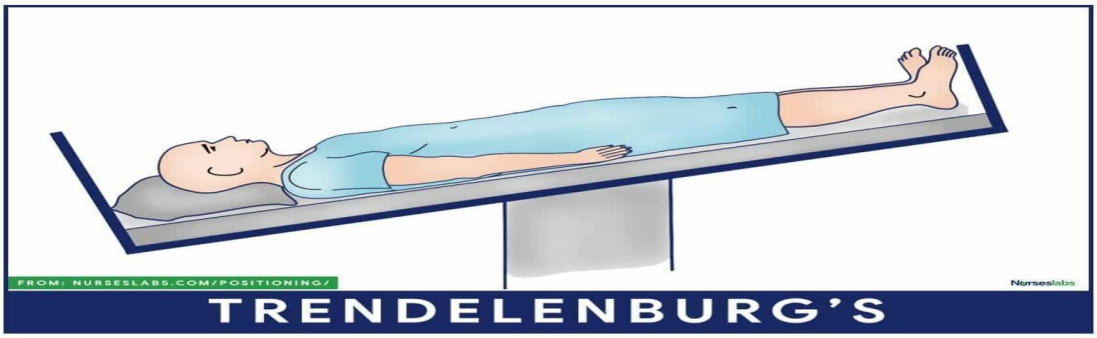
Radiological Investigations:
Ø Barium enema X-ray.
Ø Sigmoidoscopy with imaging.
Diagnostic Procedures:
Ø Rectal examinations.
Ø Enema administration..
Ø Administration enema
Ø Sigmoidoscopy
Steps
1. Position the patient on their left side.
2. Flex the right knee and hip while keeping the left leg straight.
3. Place a pillow under the head and possibly between the legs for support.

4. Adjust the arms for comfort, with the right arm in front and left arm behind the body.

7. Trendelenburg Position

Definition:

The patient is positioned on their back with the bed tilted so that the head is lower than the feet.



Radiological Investigations:

Ø Central venous catheter placement (fluoroscopy).
Ø X-rays for lung basal regions (postural drainage).

Diagnostic Procedures:

· Postural drainage techniques.
· blood flow during shock management
· certain surgical procedures.
· Central venous catheter insertion
  - ❑ Postural drainage of the basal lungs lobes
· Laparoscopy

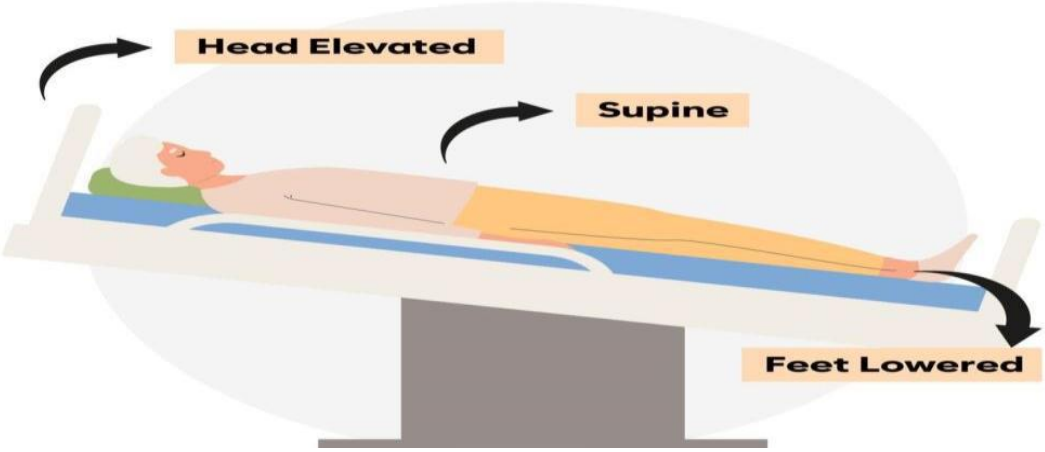
Steps:

1. Position the patient on their back with arms at their sides.
2. Tilt the bed so the head is lower than the feet, typically at a 15-30 degree angle.
3. Ensure proper alignment of the head, neck, and spine.
4. Use straps or supportive devices if necessary for stability.

8. Reverse Trendelenburg Position

Definition:

✓ The patient is positioned on their back with the bed tilted so that the head is higher than the feet.



Radiological Investigations:
• Upper GI endoscopy under fluoroscopy.
• Upper abdominal CT or MRI.
Diagnostic Procedures:
· Gastric emptying studies
· Head and neck surgery
· gastric emptying and prevent esophageal reflux
· Upper abdominal surgery
Steps:

1. Position the patient on their back with arms at their sides.

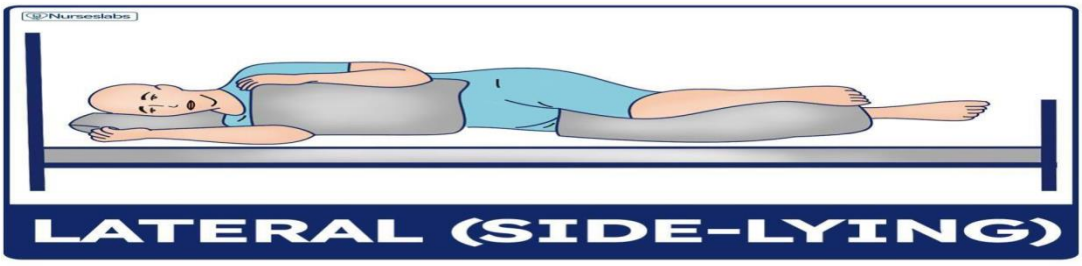
2. Tilt the bed so the head is elevated above the feet.

3. Ensure the head, neck, and spine are aligned.

4. Use pillows or supports to maintain comfort and alignment.

8.Lateral Position

Definition: The patient lies on their side with one side of the body facing downward and the other upward.



Radiological Investigations:

• Upper GI endoscopy under fluoroscopy.

- Upper abdominal CT or MRI.

Diagnostic Procedures:

• Gastric emptying studies.
• Post tonsillectomy ((left lateral))
• Thoracic surgery
• Post pneumonectomy
• Post liver biopsy ((Right lateral))
• Kidney surgery
• Post hemorrhoidectomy
• During lumber puncture ((With knees flexed up to the abdomen and neck flexed))

Types of Lateral Position:

- Left Lateral: Patient lies on the left side.
- Right Lateral: Patient lies on the right side

Steps:

1. Place the patient on their side, with the head, neck, and spine aligned.

2. Flex the lower arm and position it slightly in front of the body; the upper arm may rest on a pillow.

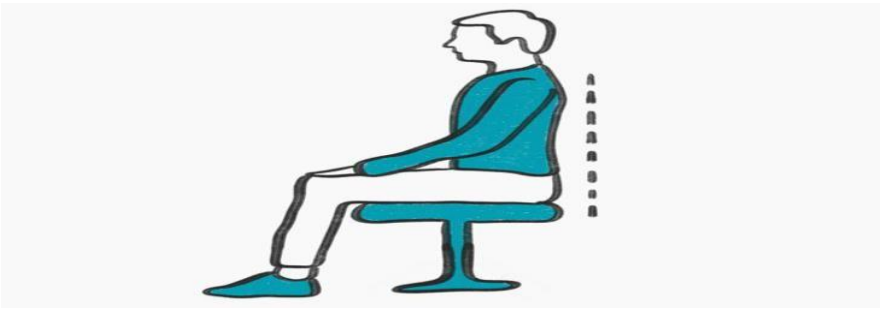
3. Bend the upper leg slightly at the knee and place a pillow between the knees for comfort and to maintain hip alignment.

4. Ensure the patient's head is supported by a pillow.

9. Sitting Position

Definition:

✓ The patient sits upright, usually at a 90-degree angle, with legs dangling off the side of the bed or supported on a surface.



Radiological Investigations:

• Pulmonary function tests with imaging.
• Doppler studies for head and neck circulation.

Diagnostic Procedures:

• respiratory assessments and treatments, as it promotes lung expansion and can help reduce shortness of breath.
• examining the head, neck, chest, and back.

Steps:

1. Assist the patient to sit up on the bed or examination table.
2. Ensure the back is straight and the feet are supported, either on the floor or a footstool.
3. Provide additional support, such as pillows behind the back, if the patient requires it.
4. Ensure that the patient's arms are comfortably positioned, either on their lap or on armrests.

10.Knee-Chest Position

Definition:

The knee-chest position is a body posture in which a person kneels on a flat surface, lowers their chest towards the surface (close or touching), and keeps the hips elevated. It creates a V-shape with the body and is commonly used in medical settings.

Radiological Investigations:

• Proctoscopy or colonoscopy with imaging.
• Barium enema X-ray for lower intestinal studies.

Diagnostic Procedures:

• Spinal Procedures:-For lumbar punctures.

- Rectal and Proctologic Examinations:- To examine the rectum and lower intestines.
- Gynecological Examinations :-Allows better access to the cervix and pelvic region.
- Labor and Delivery:-Sometimes used to relieve pressure or reposition the baby

- Relief from Abdominal or Back Pain .

Steps

1. Get into hands and knees on a flat, comfortable surface.

2. Lower the Chest – Lower upper body, bringing chest down close to or touching the surface.

3. Position the Head – Rest head on the surface, often turned to one side or with the forehead resting down.

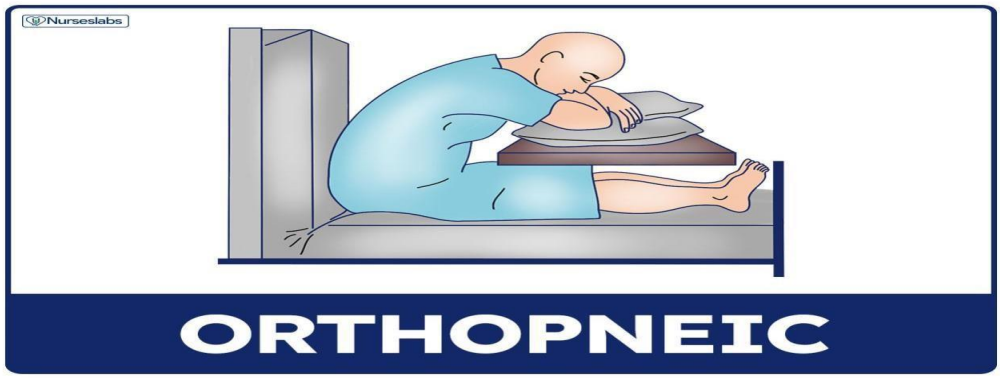
4. Elevate the Hips – Keep the hips elevated above shoulder level to form the correct posture.

5. Ensure Comfort and Stability – Keep arms comfortably positioned and adjust as necessary to maintain balance

11.Orthopneic Position

Definition:

The orthopneic position, also called the "tripod position," is a seated posture where a person sits upright at the edge of the bed or in a chair, leaning slightly forward, and rests their arms on an over-bed table or on their knees. This position helps open the chest and improve breathing.



Radiological Investigations:

• Chest X-ray for pulmonary edema or effusion.

• Echocardiography for heart function.

Diagnostic Procedures:

• Spirometry for COPD.

- Oxygen saturation monitoring during respiratory distress

• Chronic Obstructive Pulmonary Disease (COPD).

• Congestive Heart Failure – Reduces the workload on the heart by aiding in breathing efficiency.

• Asthma or Pneumonia .

Steps

to Assume the Orthopneic Position:

1. Sit on the Edge of the Bed or a Chair – Ensure that patient seated upright.
2. Lean Forward Slightly – Lean the torso forward to open up the airway.
3. Rest the Arms – Place the arms on an over-bed table, pillow, or knees to provide support.
4. Relax the Shoulders – Keep the shoulders relaxed to reduce tension and improve breathing capacity.
5. Maintain Position Comfortably – Adjust as needed to feel stable and comfortable.