HEALTH TECH ACADEMY

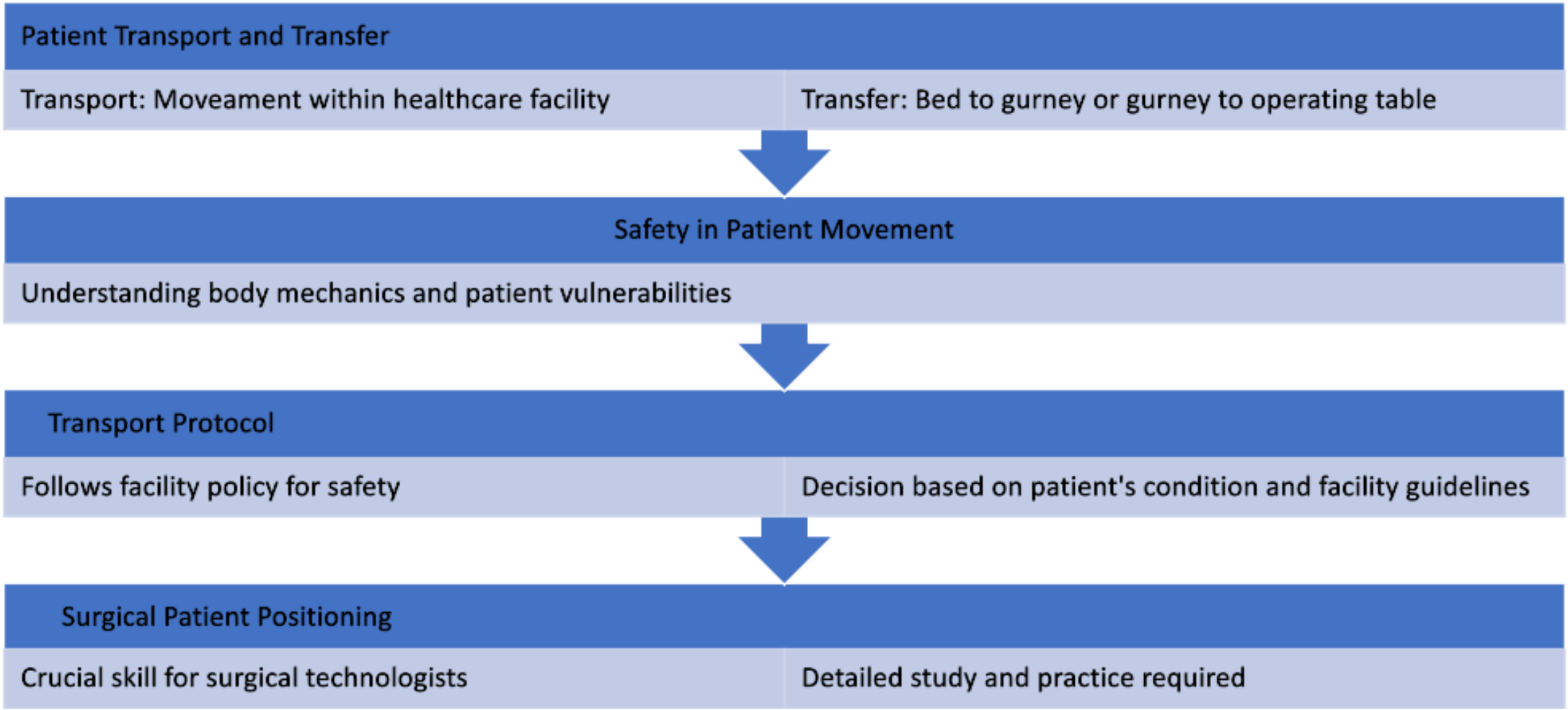
Moving, Handling, and Positioning the Surgical Patient

Treating the Surgical Patient

Lesson Objectives:

1. List and discuss the principles of safe patient transport and transfer
2. Use safe body mechanics during patient transportation, transferring, and positioning
3. Discuss common methods of patient transport and lateral moving devices used in the perioperative environment
4. Describe guidelines for transporting special patient populations
5. Describe the responsibilities of the surgical technologist in patient positioning
6. Demonstrate the use of common operating table accessories and positioning devices
7. Describe how to prevent patient injury during positioning
8. Discuss the principles of safe positioning
9. Demonstrate basic positions used in surgical procedures
10. Discuss the safety precautions for each position

Introduction



Transport and Transfers – Patient Identification

- First step towards surgical procedure itself
- Verification before transportation and procedure initiation
- Responsibility of surgical technologist according to facility policy
- Three methods of patient identification:

Verbal Identification Examples

- **Greeting and introduction**
  - Correct: "Good morning, my name is ____. Can you state your full name and date of birth?"
  - Incorrect: "Are you Mr. X? I'm here to take you to the operating room."
- **Procedure and location verification**
  - Correct: "What procedure will you be having today?"
  - Incorrect: "I see Dr. X is planning to put a plate in your elbow."
- **Operative side verification**
  - Correct: "Can you tell/show me which side will be operated on?"
  - Incorrect: "So, Dr. X is planning to operate on your right elbow today?"

Duties of the Surgical Technologist

- Understand common positions and the surgeries
- Know ahead of time the position
- Proactively prevent accident and injury
- Question any potential risks
- Remain alert and focused
- Communicate

Principles of Patient Transport

- Know the risks
- Protect the patient's personal dignity at all times
- Perform deliberate movement
- One person controls the move
- Know your equipment
- Do not abandon the patient
- Protect the patient
- Identify the patient (check ID)
- Tell the patient what to expect

Talking with the Patient's Family

- Talking with the patient's family
  - Remember they will be anxious/nervous
  - Allow them to accompany the patient as far as possible
  - Make sure to reassure the family of the patient's well-being
  - Give updates on the surgery's progress and patient's condition as often as possible

Transfer Devices

- **Moving and handling devices**
  - Stretcher (Gurney)
  - Wheelchair

- **Lateral transfer devices**
  - Air-assisted transfer system "Hover Mattress"
  - Transfer board
  - Roller board
  - Mechanical hoist

Watch the "Safe Patient transfer Procedure" Video

Safe Patient Transfer Procedure Video

- **Start at 0:14**

Safe Patient Transfer Procedure Video

Summary of Video:

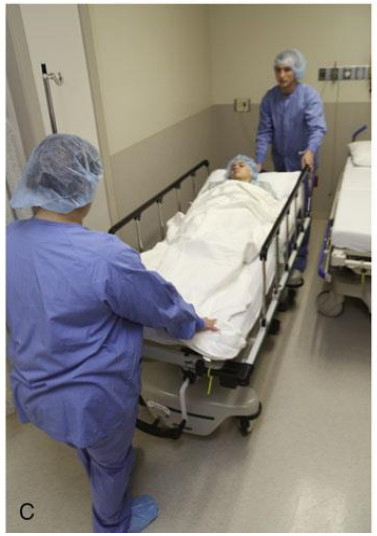
- Explain process to patient prior to moving
- Ensure bed is locked
- Follow safe body mechanics
- Awake Patient: Assist them as they move
- Sedated/Anesthetized patient: at least 4 personnel for move

Transport by Gurney

- Basic method for transporting non-ambulatory patients
- **Equipment on Gurney**
  - Side rails, IV hanger, safety strap, oxygen tank cradle, brakes, pedal operation, hand grips, tilt adjustment, height adjustment, back board, removable mattress
- **Gurney Operation Tips**
  - Practice needed due to weight and equipment
  - Steering mechanism explained
  - Correct settings for different actions
- **Mnemonic for Settings**
  - Neutral: "No Steering"
  - Steer: "Straight ahead"
  - Brake: "Be safe"

Bed to Gurney: Bringing Patient to the OR

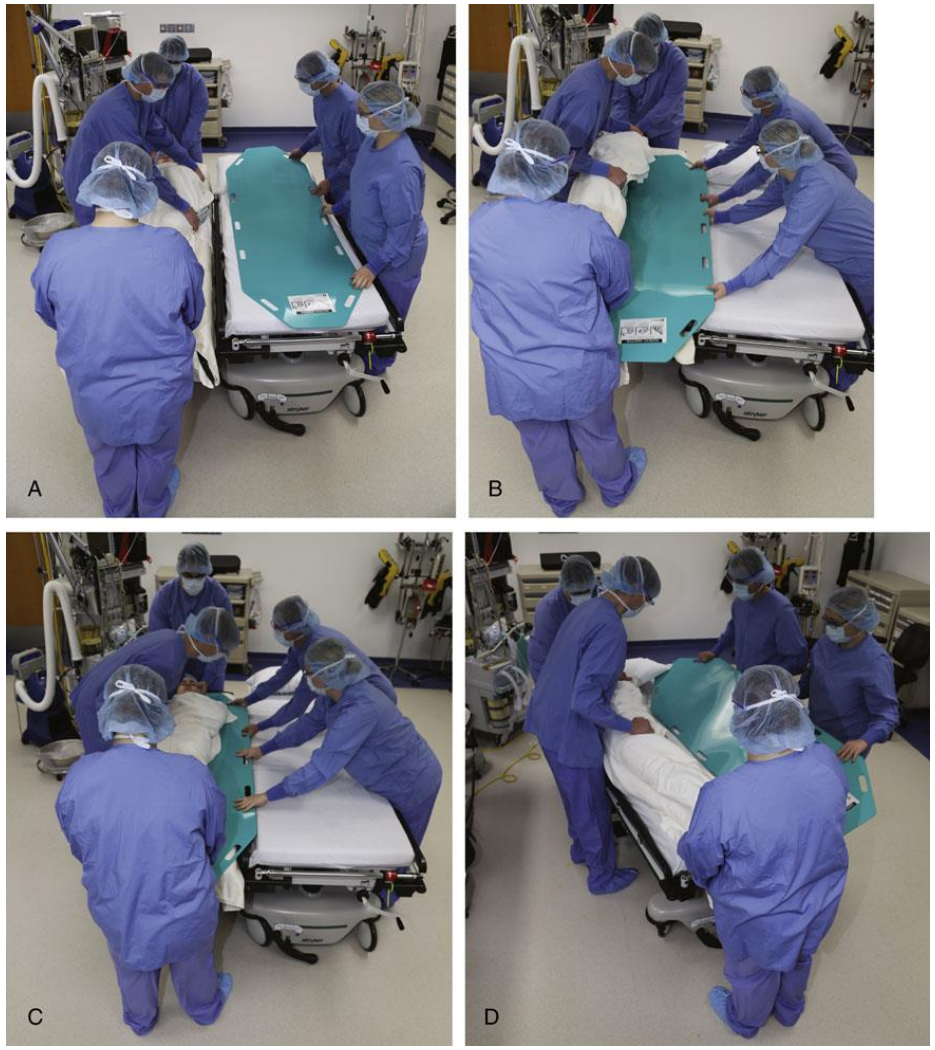
- Preparation of the Gurney
  - Safety strap, IV pole, pillow, blanket, and sheet
- Alerting Nursing Staff
  - Informing staff upon arrival in ward or patient holding area
- Verification of Patient's Location
  - Confirming patient's whereabouts before proceeding
- Collection of Required Documents
  - Gathering charts, test results, and forms
- Introduction and Verification
  - Introducing yourself, verifying patient's identity

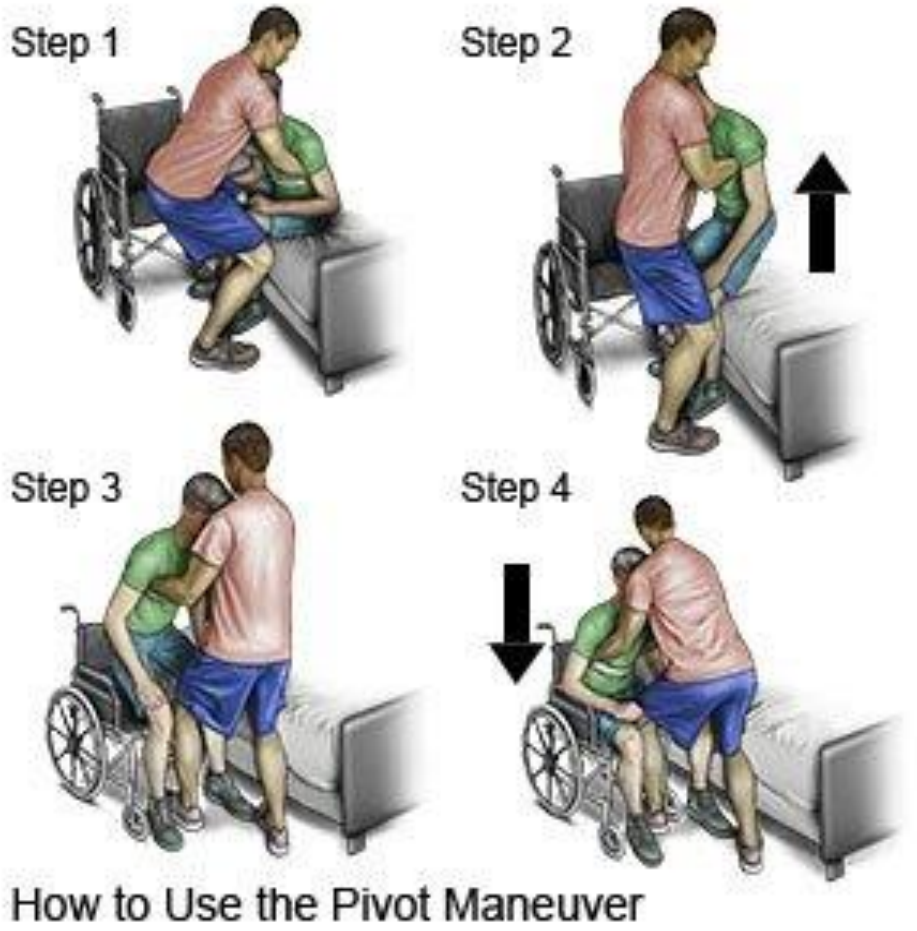


Performing Assisted Lateral Transfers

- Moving patients in supine position between surfaces
- Common in perioperative care for bed-gurney-table transfers
- **Log Roll Maneuver**
  - Used for supine lateral transfer
  - Maintains neutral spine position
- **Key Transfer Devices**
  - Transfer board: Durable, reduces friction
  - Glide sheet: Smooth fabric for friction reduction
  - Roller board: Metal rollers for frictionless movement
  - Air-assisted device: Lifts mattress for easy movement

Assisted Lateral Transfers

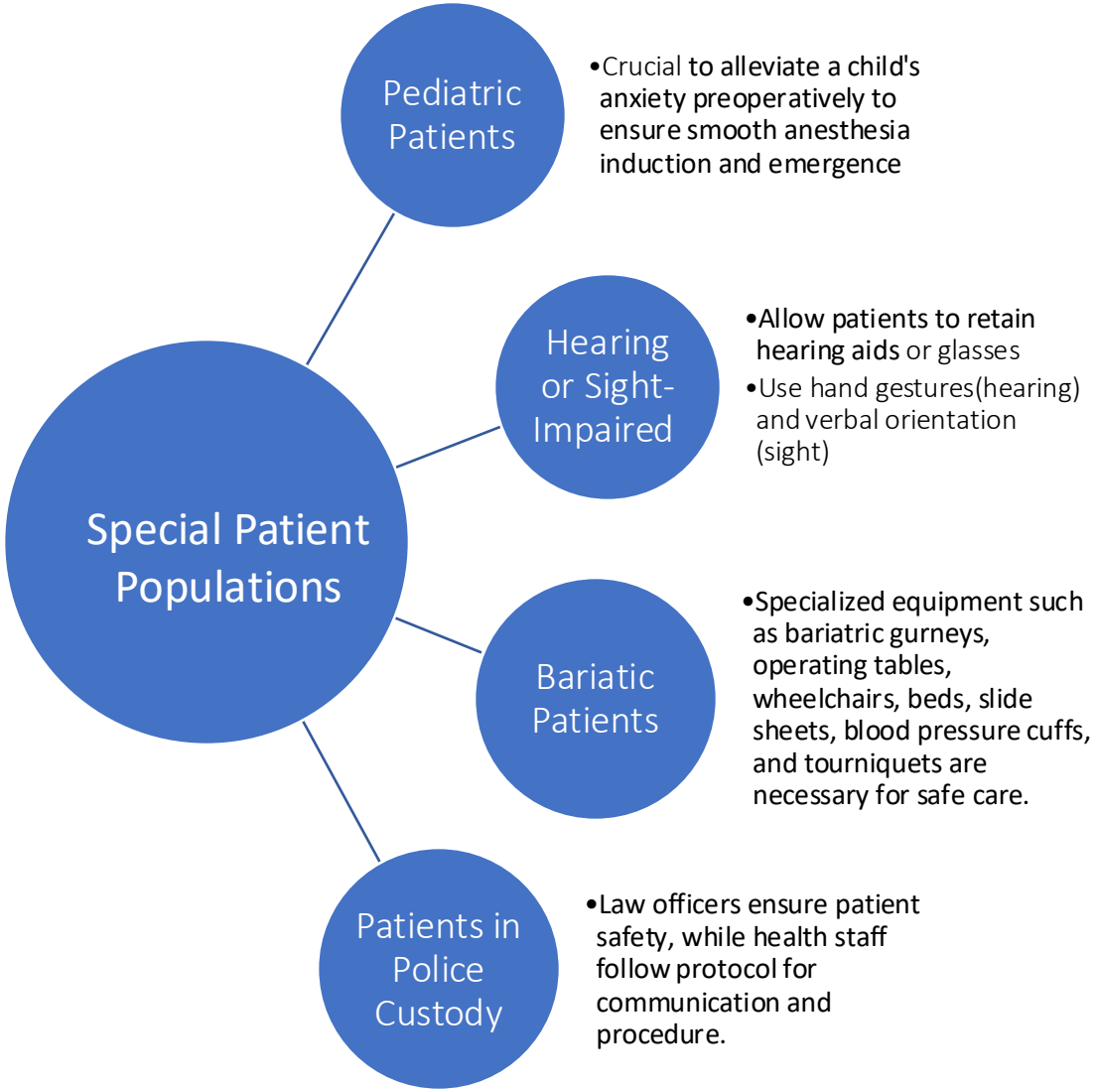




Assisting a Falling Patient

- **Assisting a Falling Patient:**
  - Protecting the patient: Guide patient gently to the floor, safeguarding their head.
  - Secure stance: Spread feet for stability, bend knees, and use thigh muscles for support.
  - Follow patient's movements: Keep pace with patient to prevent sudden drops.
  - Call for help: Immediately seek assistance while staying with the patient, never leaving them unattended.

Special Patient Populations



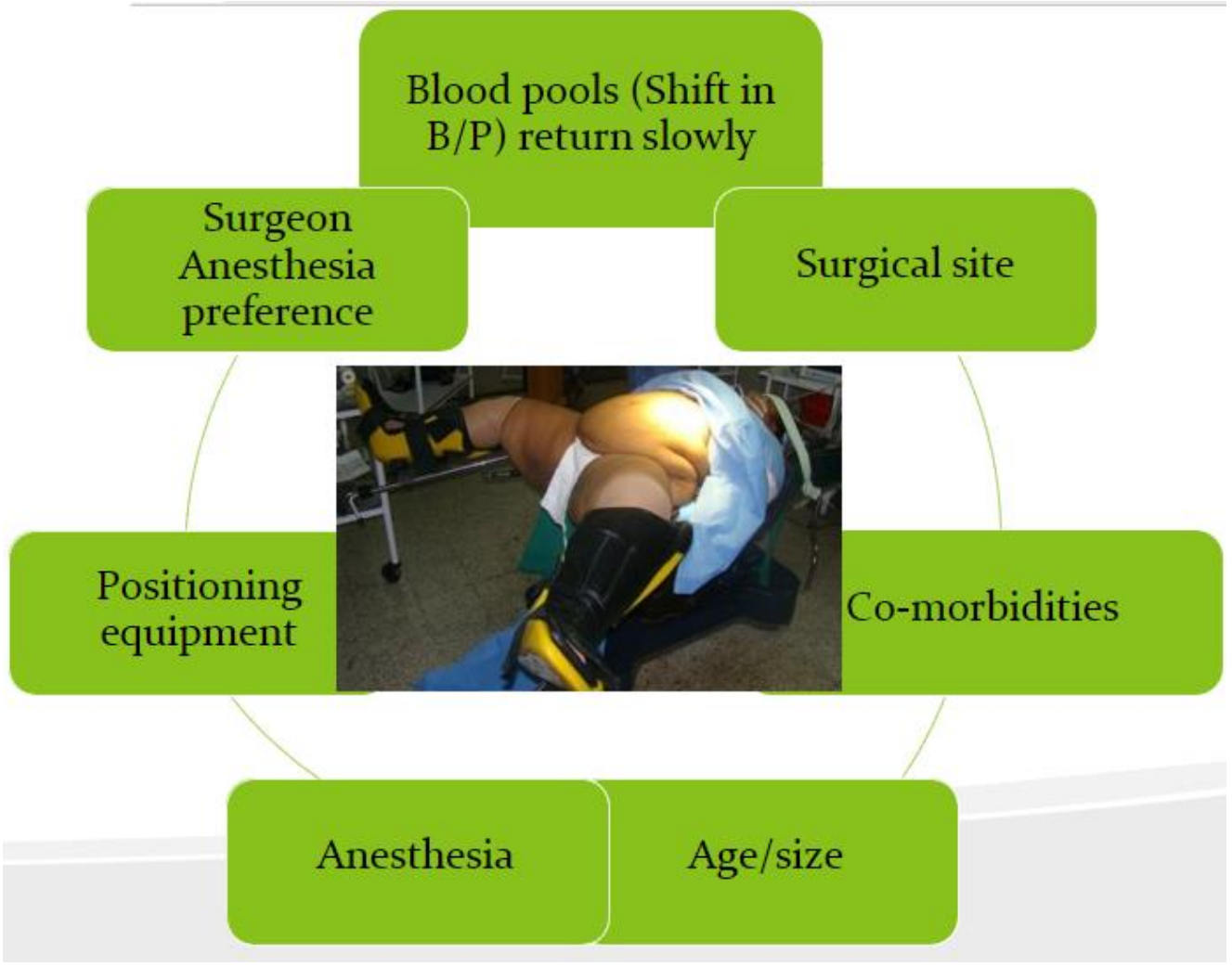
Positioning the Surgical Patient

- Patients are placed in specific positions:
  - To allow surgical access
  - To reduce physiological effects
  - To permit monitoring access
  - Unobstructed access for the surgeon

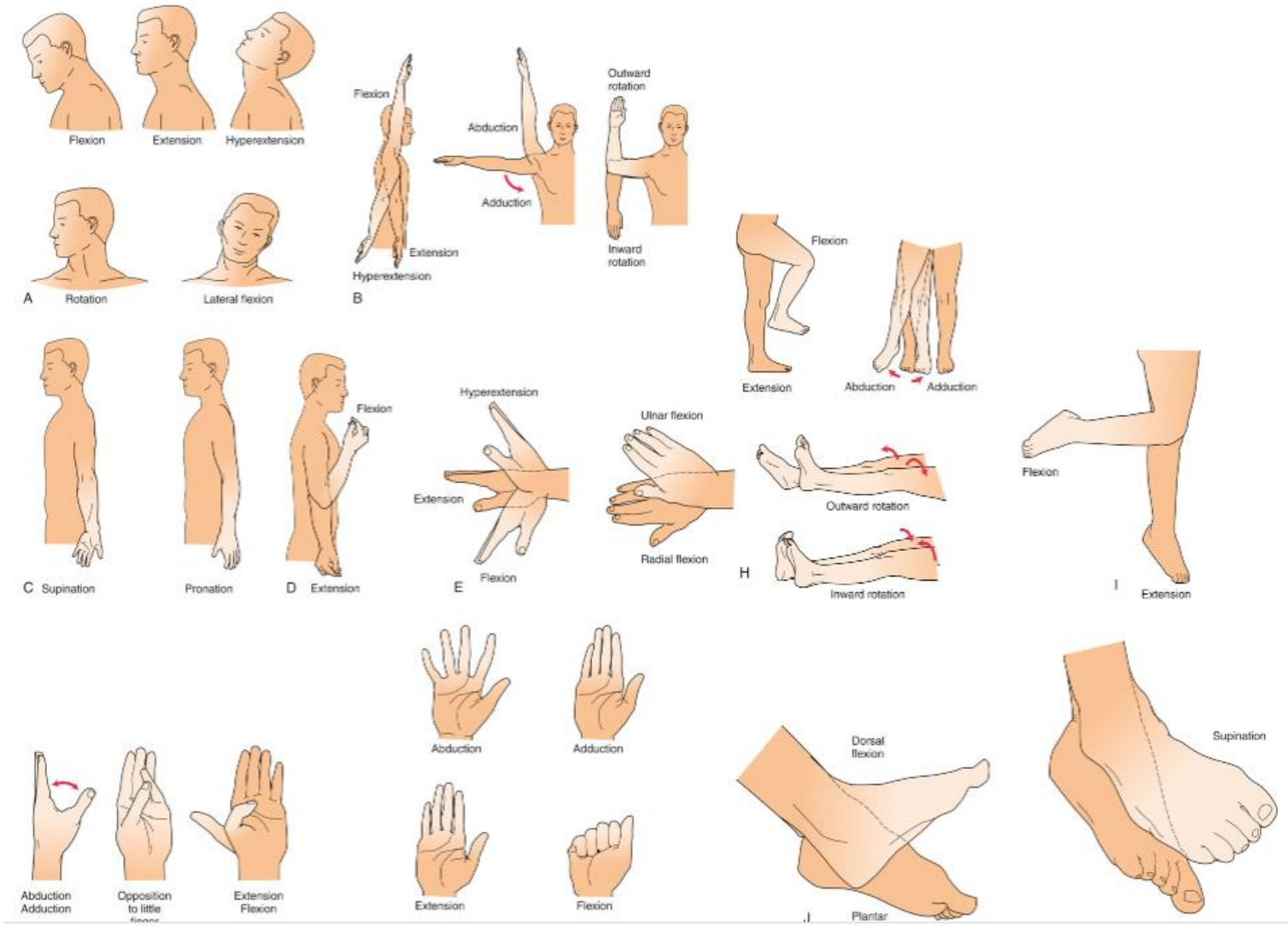
Elements of Proper Positioning

- **Knowledge of anatomy and physiology**
  - Know the pressure points of the intended surgical position
- **Planning**
  - Padding and positioning devices to prevent damage
- **Teamwork**
  - Coordinate movements, following proper body mechanics to prevent patient injury

Considerations for Positioning



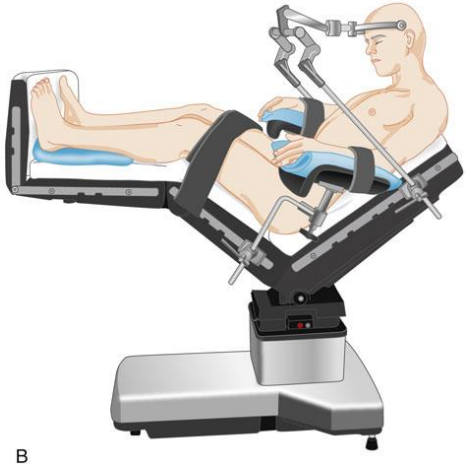
Normal Range of Movements



Surgical Positions

- Supine (dorsal recumbent)
- Trendelenburg
- Reverse Trendelenburg
- Lithotomy
- Fowler and modified Fowler
- Lateral decubitus
- Prone
- Jackknife (Kraske) position
- Spinal table
- Orthopedic table

A



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Watch the "Patient Positioning" Video for an Overview

Patient Positioning Video

Patient Positioning Video

Summary of Video:

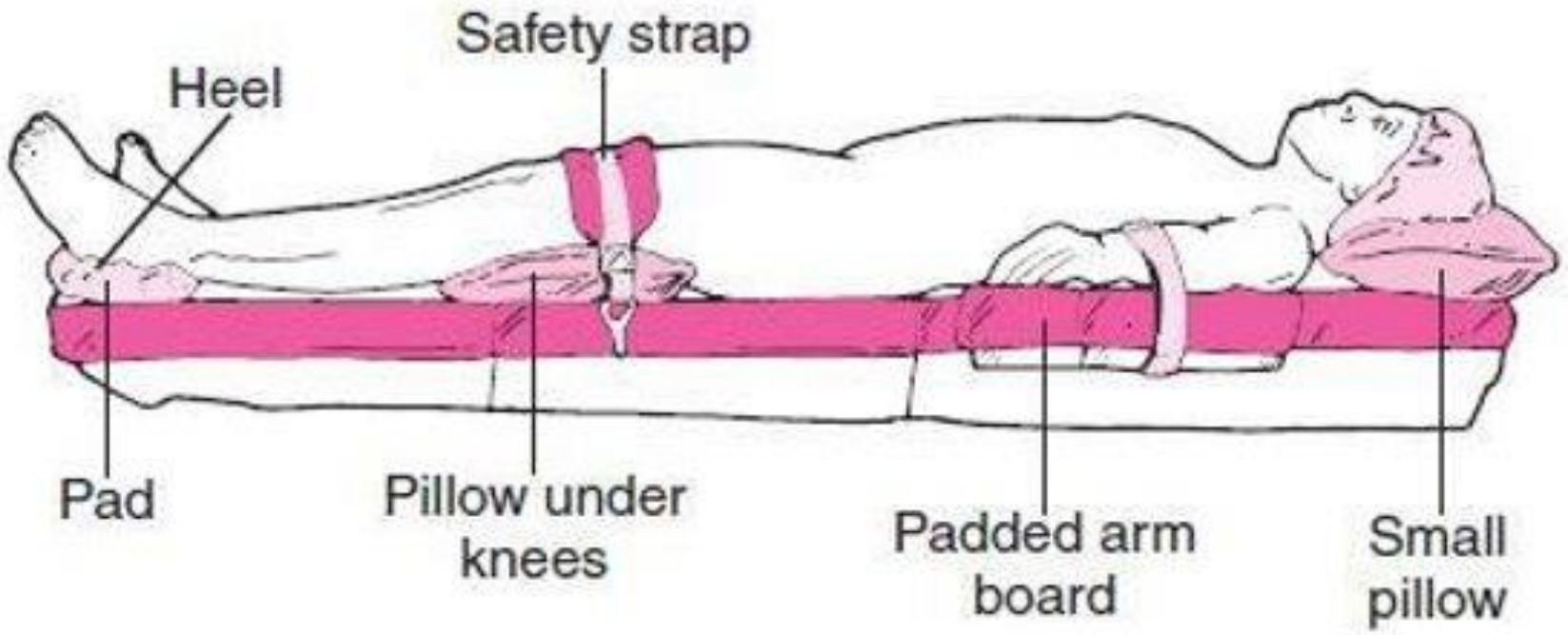
- Supine
- Trendelenburg/Reverse Trendelenburg
- Beach Chair
  - Sitting position
- Lithotomy
  - Perineal cutout used and stirrups
- Prone
- Jackknife/Kraske
- Lateral

Supine

- Back
- Arms at side
  - Never over 90
- Palms up
- Pillows/Padding
  - Head, lumbar, knees
- NO feet off bed
- Belt!!!!

- Areas of risk-Extra padding
  - Occipital
  - Olecranon
  - Pelvis
  - Ankle
- Accessible regions
  - Head/neck
  - Anterior U/l extremity
  - Chest/breast
  - ABD/Pelvis

Supine


Safety strap
Heel
Pad
Pillow under knees
Padded arm board
Small pillow

Trendelenburg

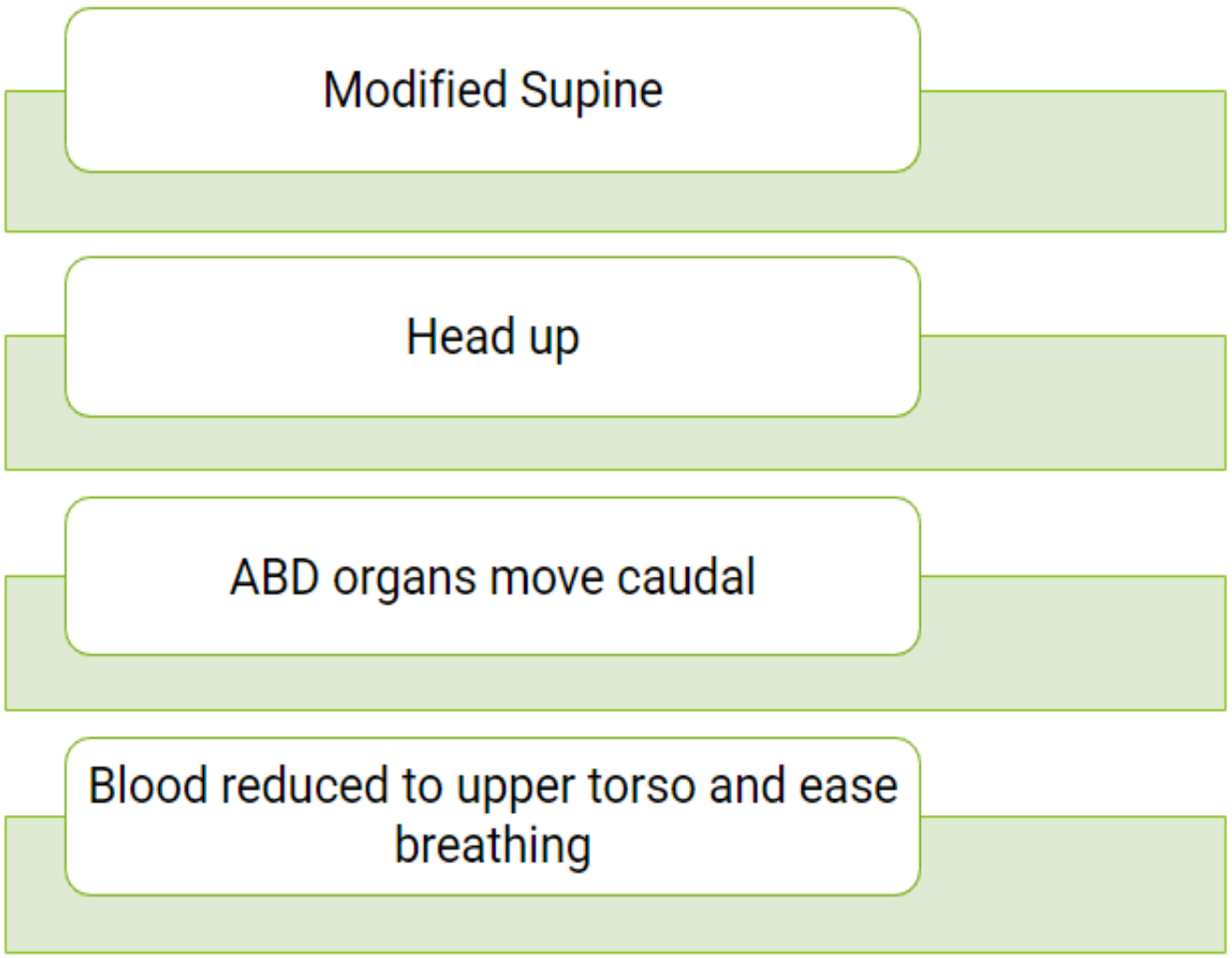
- Modified Supine
- Head/torso Lower than legs
- Organs move cephalad
- Blood reduced to lower body

Accessible Regions:

- Pelvis
- Lower ABD

Trendelenburg

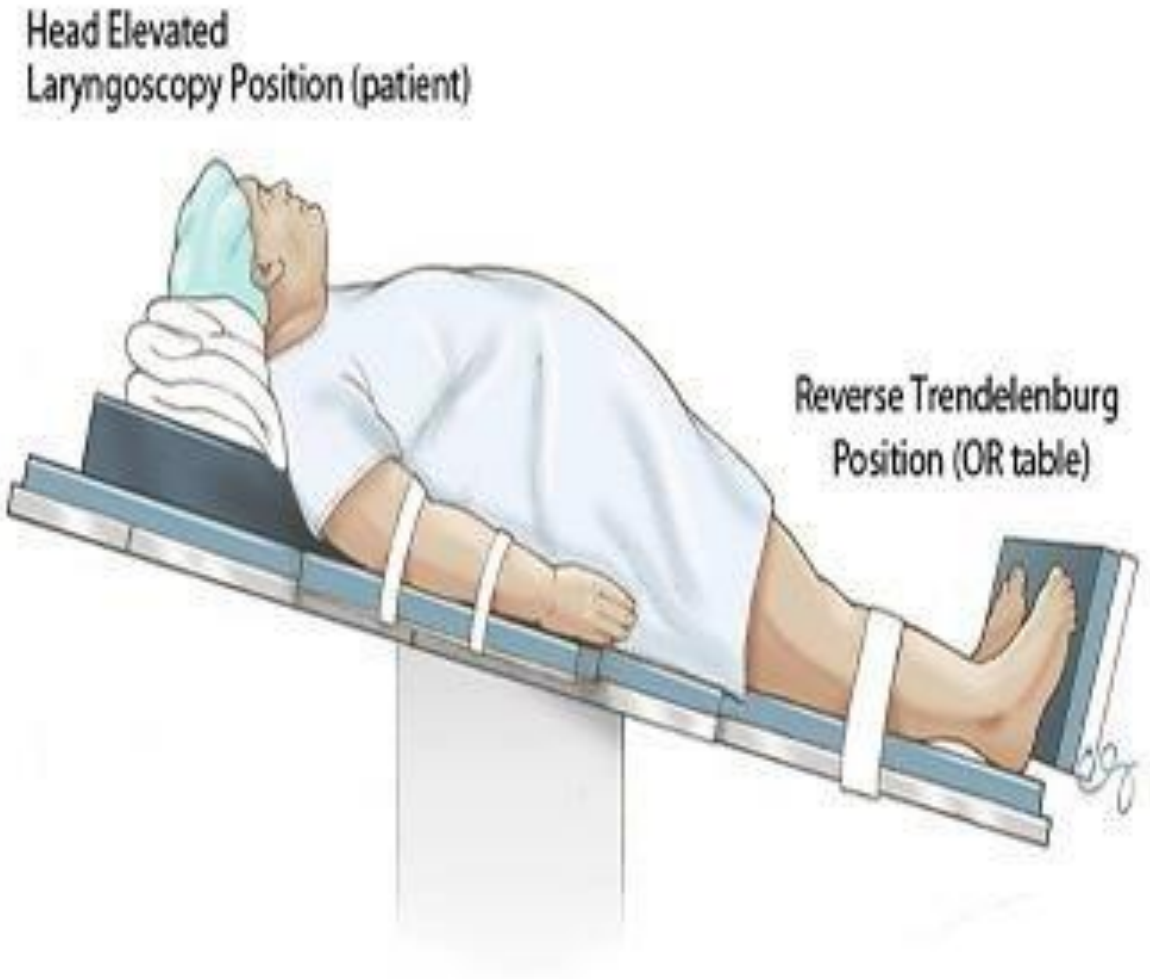
Reverse T-Burg



Accessible Regions:

- Upper ABD
- Head/Neck

Reverse T-Burg



Fowler's Position (Beach Chair)

- Modified Supine
- Head up
- Reduce blood upper body
- Ease breathing

Accessible Regions:

- Breast
- Shoulder

Fowler's Position (Beach Chair)

Sitting Position

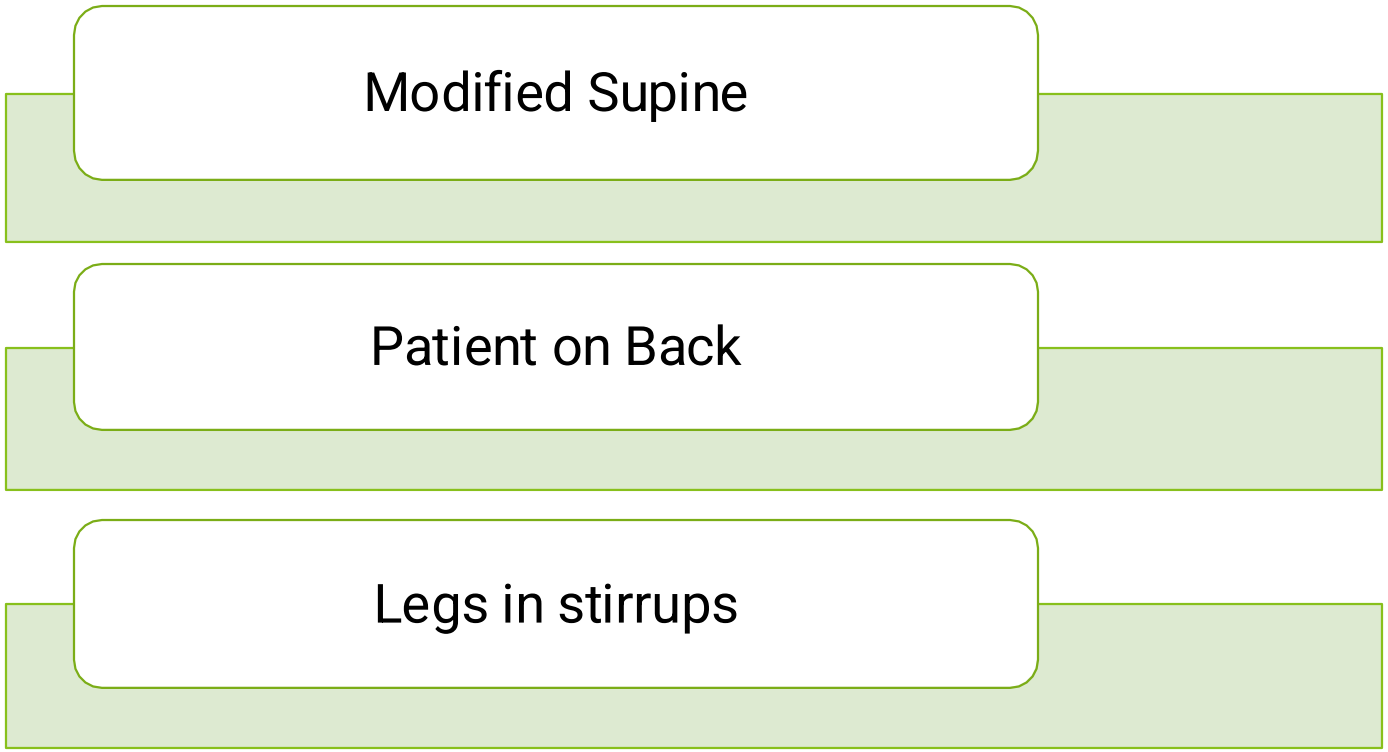
- Modified Fowler's
- Head up
- Torso fully up-right
- Arms in lap

Accessible Regions:

- Head/Brain

Sitting Position

Lithotomy Position



Accessible Regions:

- Vagina
- Urethra
- Anus/Rectum

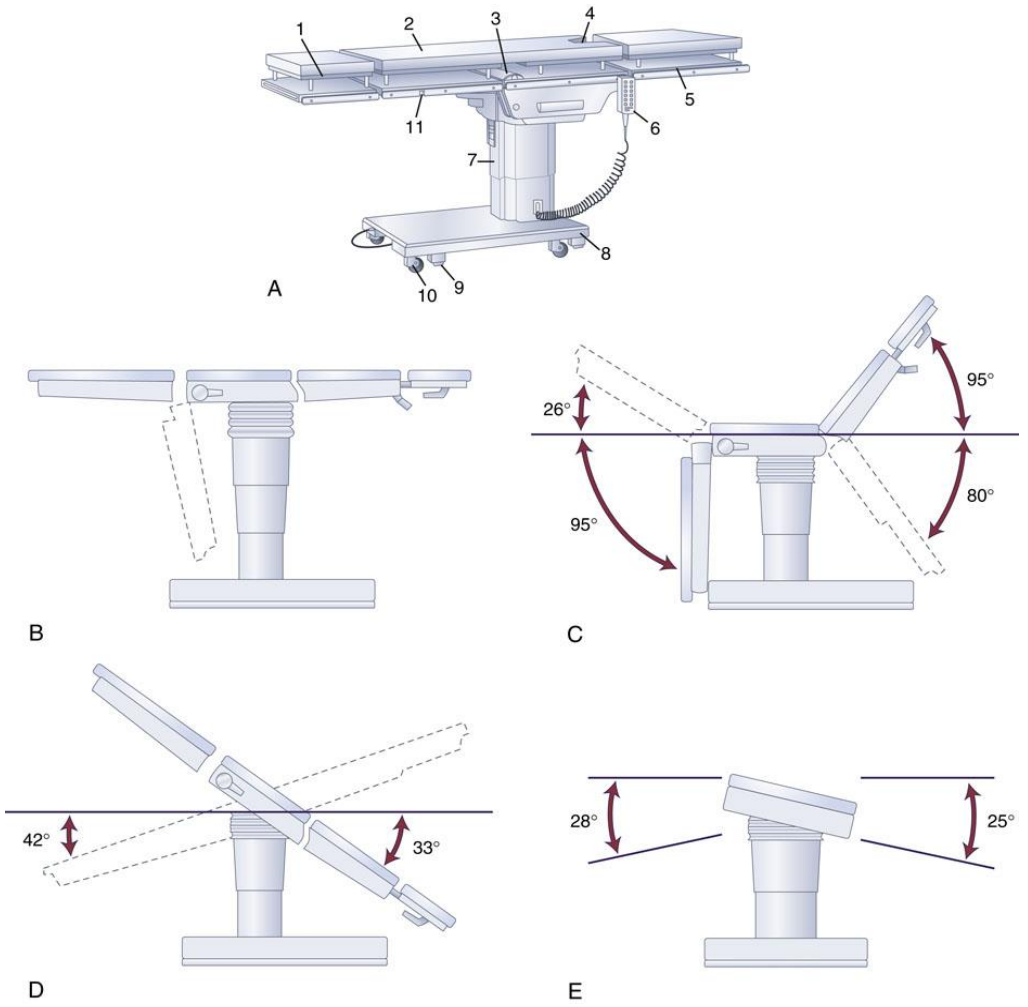
Lithotomy Position

General Operating Table Features

- Pads
- Remote control
- Head- and footboards
- Kidney rest
- Perineal cutout

Operating Table Components

- Removable head section
- OR table pad (mattress)
- Kidney lift
- Perineal cutout
- Radiolucent top and removable head section
- Hand control unit
- Hydraulic lift cylinder
- Table base
- Floor locks
- Locking swivel casters
- Side rail locking system



General Operating Table Attachments

- Arm boards or toboggan
- Shoulder braces
- Stirrups
- Head rest
- Padded frames
- Footboards

Preventing Patient Injury

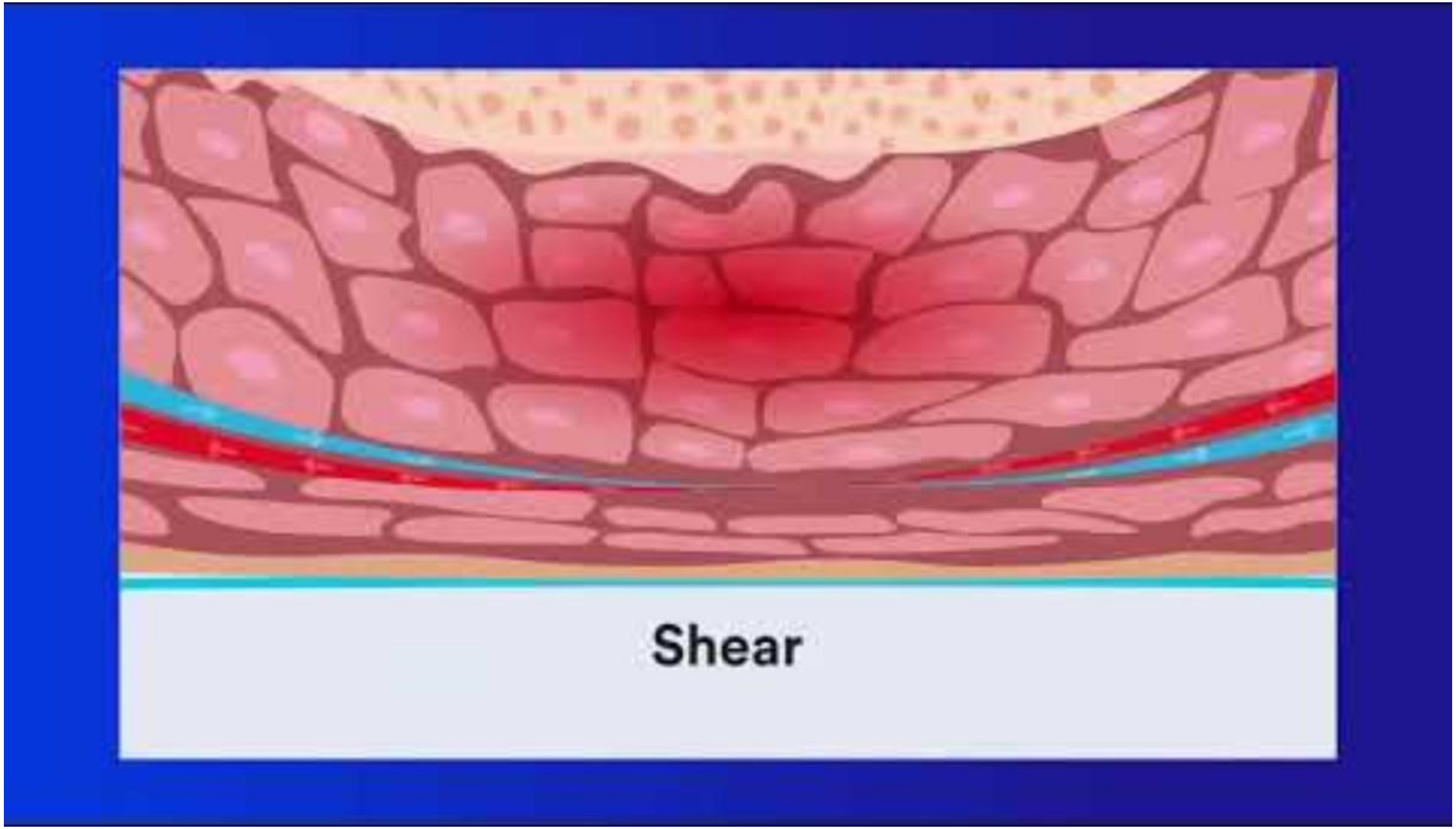
- Nerves and blood vessels
- Compression injury
- Shear injury
- Pressure injury
- Skeletal injury and embolism
- Respiratory compromise
- Eye and ear injury

- Surgical Patients are in the same position for prolonged periods, so extra steps should be taken to pad and prevent damage

- Patients in the OR are unable to reposition themselves, so it is important that the surgical team positions them effectively and understand the risks

Watch the "Pressure Injury Causes" Video

Pressure Injury Causes



Pressure Injury Causes Video

Summary of Video:

- Pressure, Friction, and Shear cause tissue damage
- Moisture also causes damage, or can exacerbate other forces

Read Chapter 16 from E-Book

Read Chapter 16 from your E-Book to pass the upcoming quiz from **Surgical Technology - Elsevier eBook on VitalSource, 8th Edition.**

Click Here to access Chapter 16!

Watch the Video from Chapter 16 of the E-book

- Watch the videos on "The Operating Table" , "Patient Transfer" , and "Patient Positioning" from **Surgical Technology - Elsevier eBook on VitalSource, 8th Edition** by logging into your Evolve account

- **Click Here** to access the "Operating Table video"!
- **Click Here** to access the "Patient Transfer" video!
- **Click Here** to access the "Patient Positioning" video!

Thank you!

Get ready for your quiz and rest of the activities now. Best of luck!

Congratulations!

Lesson 16 is complete.