Perioperative Nursing Management

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Perioperative Patient-Focused Model
To promote optimal lung expansion & consequent blood oxygenation after anesthesia

Sitting Position

Deep Breathing
Diaphragmatic Breathing and Splinting When Coughing

To mobilize secretions so that they can be removed

Put the palms of both hands together, interlacing the fingers snugly. Placing the hands across the incisional sits acts as an effective splint.
To improve circulation and prevent venous stasis

**Leg Exercises and Foot Exercises**

- Trace circles with feet
- Extension & flexion of the knee, hip, joints (similar to bicycle riding)

**Instructions:**
- Flex
- Straighten
- Down

**Extension & flexion of the knee, hip, joints (similar to bicycle riding)**
Areas to be shaved

Figure 7-7  Areas to be shaved. A. Head surgery. B. Abdominal surgery. C. Thoracoabdominal surgery. D. Gynecologic surgery. E. Genitourinary surgery. F. Forearm, elbow, or hand surgery. G. Hip surgery. H. Lower leg or foot surgery.
Positioning A Patient for Surgery

**Laparotomy**
- Strap above the knees

**Trendelenburg**
- Padded shoulder braces in place

**Lithotomy**
- Hips extend over the edge of the table

**Sidelying**
- A pillow is placed between legs
The brace press on brachial plexus
Pronation of the forearm rotates the elbow  
Supination of the forearm rotates the elbow

**COLUMN A**

**COLUMN B**

FIG. 2. In a supine patient, pronation of the forearm rotates the elbow such that the cubital tunnel is in contact with any flat supporting surface presumably placing the ulnar nerve at risk for external compression (A). Conversely, supination of the forearm rotates the elbow such that the cubital tunnel is no longer in contact with any flat supporting surface (B). (Modified from ref. 119, with permission.)
Upper leg is extended, lower leg is flexed at knee and the hip joints.

A pillow is placed between the leg.
Stages of General Anesthesia

<table>
<thead>
<tr>
<th>STAGE</th>
<th>PUPIL</th>
<th>RESP</th>
<th>PULSE</th>
<th>B.P.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1ST INDUCTION</td>
<td>USUAL SIZE</td>
<td>REACTION TO LIGHT</td>
<td>IRREGULAR</td>
<td>NORMAL</td>
</tr>
<tr>
<td>2ND EXCITEMENT</td>
<td>OR</td>
<td>OR</td>
<td>IRREGULAR AND FAST</td>
<td>HIGH</td>
</tr>
<tr>
<td>3RD OPERATIVE</td>
<td></td>
<td>OR</td>
<td>STEADY SLOW</td>
<td>NORMAL</td>
</tr>
<tr>
<td>4TH DANGER</td>
<td></td>
<td>OR</td>
<td>WEAK AND THReady</td>
<td>LOW</td>
</tr>
</tbody>
</table>

Medullary depression
Used for produces involving the lower abdomen, groin, perineum, lower extremity.
CSF → Headache → Flat 6-8 hrs

Autonomic, sensory, and motor blockade
Bardycardia, Hypotension, Nausea/Vomiting

Patient can remain fully conscious
Potential Problems

Neuropsychologic
- Pain
- Fever
- Delirium
- Hypothermia

Respiratory
- Airway obstruction
- Hypoventilation
- Aspiration of vomitus
- Atelectasis
- Pneumonia
- Hypoxemia

Cardiovascular
- Hemorrhage
- Hypotension and shock
- Thrombosis and phlebitis
- Pulmonary embolism
- Postural hypotension

Urinary
- Retention
- Infection
- Renal failure

Integumentary
- Nausea and vomiting
- Distention and flatulence
- Paralytic ileus
- Hiccoughs
- Delayed gastric emptying
- Ineffective wound healing
- Infection
- Hematoma
- Dehiscence and evisceration
- Keloid formation

Fluid and electrolyte
- Fluid overload
- Fluid deficit
- Hypokalemia/hyperkalemia
- Acid-base disorders

FIG. 19-1 Potential problems in the postoperative period.
Patient Position for Recovery from General Anesthesia
Head and Jaw Positioning to Open Airway

Tilting the head back to stretch the anterior neck structure lifts the base of tongue off the posterior pharyngeal wall.

Figure 20-1, pp. 380
Use of Oral Airway

Note: Do not remove oral airway until evidence of gag reflex returns

Maintain Pt’s airway
By using pillow or rolled blanket provides support to incisions and aids in coughing and expectoration of secretions
Types of Wound Healing

First Intention
- Clean incision
- Early suture
- Hairline scar

Granulation tissue is not visible and scar formation is minimal

Second Intention
- Granulation, occurs in infected wound (abscess) or in wounds in which the edges have not been approximated

Third Intention
- Secondary suture, deep wounds
Nursing interventions to promote wound healing also include management of surgical drains & dressings.

**Types of Surgical Drains**

- **Penrose**
- **Jackson-Pratt**
- **Hemovac**

Output from wound drainage system needs to be recorded.
Determining readiness for discharge from the PACU

<table>
<thead>
<tr>
<th>Area of Assessment</th>
<th>Point Score</th>
<th>Upon Admission</th>
<th>15 min</th>
<th>30 min</th>
<th>45 min</th>
<th>60 min</th>
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<tr>
<td><strong>Activity</strong></td>
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<tr>
<td>(Able to move spontaneously or on command)</td>
<td>2</td>
<td></td>
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<tr>
<td>• Ability to move all extremities</td>
<td>1</td>
<td></td>
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<tr>
<td>• Ability to move 2 extremities</td>
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<tr>
<td>• Unable to control any extremity</td>
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<tr>
<td><strong>Respiration</strong></td>
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<tr>
<td>• Ability to breathe deeply and cough</td>
<td>2</td>
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<tr>
<td>• Limited respiratory effort (dyspnea or splinting)</td>
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<tr>
<td>• No spontaneous effort</td>
<td>0</td>
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<td><strong>Circulation</strong></td>
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<tr>
<td>• BP ± 20% of preanesthetic level</td>
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<tr>
<td>• BP ± 20% −49% of preanesthetic level</td>
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<tr>
<td>• BP ± 50% of preanesthetic level</td>
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<td><strong>Consciousness</strong></td>
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<td>• Fully awake</td>
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<td>• Arousable on calling</td>
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<tr>
<td>• Not responding</td>
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<tr>
<td><strong>O₂ Saturation</strong></td>
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<tr>
<td>• Able to maintain O₂ sat &gt;92% on room air</td>
<td>2</td>
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<tr>
<td>• Needs O₂ inhalation to maintain O₂ sat &gt;90%</td>
<td>1</td>
<td></td>
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<tr>
<td>• O₂ sat &lt;90% even with O₂ supplement</td>
<td>0</td>
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<tr>
<td><strong>Totals:</strong></td>
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<tr>
<td>Required for discharge from Post Anesthesia Care Unit: 7–8 points</td>
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Measure of oxygen carried by hemoglobin in the blood

Color