



*South Eastman Health/Santé Sud-Est Inc.*

	<b>No: SC-POST001</b>
<b>Approved By: Facility Managers</b>	<b>Source: Regional Client Care Manual</b> <b>Category: Surgical Care</b>
<b>New/Replaces:</b> <b>Date Approved: October 26, 2004</b> <b>Reviewed:</b> <b>Revised:</b>	<b>Subject: Postoperative Nursing Care</b>

### Purpose

To promote therapeutic nursing therapies and management of postoperative clients to achieve optimal return to health after a surgical procedure based on best practice standards.

### Procedure

1. Prepare client's room to receive client from PACU and have necessary equipment required to provide care:
  - make surgical bed, extra pillows for positioning, extra blankets for warmth
  - IV pole, infusion pump, and PCA (patient controlled analgesia) pump if required
  - oxygen/nasal prongs & suction available at bedside
  - connect gomco if indicated
  - kidney basin at bedside, toothettes & mouthcare supplies, especially if NPO
2. When receiving client from PACU, obtain report from discharging PACU RN.
  - receiving nurse signature is required on the PACU record as the receiving nurse
3. Transfer client from PACU to surgical department via stretcher.
4. Once in client's room, assist client to transfer from stretcher to bed.
  - use transfer board to facilitate transfer, if available.
  - transfer carefully to avoid strain on suture line.

- extra caution is required for clients who have had spinal anaesthesia and altered sensation to limbs
- transfer slowly and gently to avoid sudden changes in vital signs

5. Position client utilizing good body mechanics.

6. Complete initial assessment of client's status including:

- level of consciousness and orientation to person, place, and time
- appropriateness of response to simple commands
- assess temperature, pulse, respirations, blood pressure, oxygen saturation levels
- assess client's skin color
- apply supplementary oxygen if required
- initiate deep breathing and coughing and leg exercises and continue q2H and PRN
- assess presence of TEDS if applicable
- assess IV insertion site and regulate IV as ordered, use infusion pump as necessary
- assess functioning of any tubes, catheters, or drains
- assess surgical wound dressing and mark any drainage
- initiate fluids as ordered & tolerated or maintain NPO as ordered
- assess client's comfort status and pain management
- review physician's orders & initiate as required
- document initial assessment and interventions

7. Postoperative Monitoring Regime:

a) Vital Signs

- routine assessment and recording of temperature, pulse, respirations, blood pressure, and oxygen saturation levels upon admission and q1hourly times 4 hours then q4h for the first 24 hours postoperative then reassess if frequency can be reduced to QID PRN
- reassess frequency of vital signs daily
- reassess and increase frequency of vital signs as needed
- contact physician of any abnormalities
- oxygen saturation should be maintained at > 95%, if unable to do same on room air then supplement with oxygen
- fever (temp >37.5) should be monitored

Note well: Contact attending surgeon with any abnormalities

- factors that increase risk of a fever developing include:
  - operation longer than 2 hours
  - intraoperative transfusion
  - pre-existing infection
  - preoperative antibiotic prophylaxis

- common causes of fever include:
  - atelectasis
  - pneumonia
  - urinary tract infection
  - septic and nonseptic phlebitis
  - drug allergies
  - wound infection and other deep infections

b) Postoperative Physician's Orders

- preoperative orders are automatically discontinued with surgical intervention
- surgeon will document diagnosis, operation performed, client's condition, and list monitoring and therapeutic measures to be employed (analgesia, antibiotics, wound care, IV fluid administration, and the handling of tubes, catheters, and drains)

c) Fluid Intake & Output

- monitoring and recording intake and output (ex: NG, urinary, hemovac, etc.) accurately x 24 hours on 24 hr Fluid Balance Record and reassess PRN
- record time and amount of first and second voidings on 24 hr Fluid Balance Sheet
- reassess frequency of monitoring intake and output after 24 hours
- if abnormalities, document on vital signs record or IPN/Nurses Notes
- initial void should occur within approx. 8 hours postoperatively
- foley catheterization is routinely used for some surgeries and is ordered by the attending surgeon
- when foley in place ensure foley is secured, peri-care bid, upon removal of foley measure & record initial 2 voidings
- Prevent UTI's by:
  - avoiding nonessential catheterization
  - using meticulous aseptic technique to avoid introduction of bacteria
  - securing the catheter to prevent movement
  - maintaining proper drainage
  - removing the catheter at the earliest opportunity
  - maintain hydration

d) Fluid Therapy

- postoperative fluid therapy is ordered by surgeon based on client's overall preoperative condition, preoperative diagnosis, and circumstances of operative procedure
- presence of cardiac, pulmonary, renal, or hepatic disease will affect tolerance of fluid
- maintenance of fluid administration and adequate hydration is important
- adequate urine output is a good indicator of good hydration

- fluid imbalances such as hypovolemia are manifested by low urine output, increased heart rate, low or borderline BP, depressed mental status, poor capillary refill – these symptoms may require a fluid challenge as ordered by the physician
- measure urine output initially for 24 hours and reassess

e) Lab Tests

- attending surgeon will order any required postop lab monitoring
- ensure surgical post op lab tests are reported on an “Urgent” basis @ Bethesda
- report abnormal results to the attending surgeon

f) Postoperative Pain Management

- treatment of postop pain begins with educating the client preoperatively regarding pre, intra, and postoperative expectations
- systemic medications used for postoperative pain relief include opioids, NSAIDS, and other non narcotic agents
- PCA (patient controlled analgesia) will be offered to appropriate clientele
- surgeons will leave orders for postop pain management
- ineffective management should be problem solved with surgeon
- assess client comfort hourly & PRN
- assess effectiveness of analgesia, reevaluate pain management frequently, and monitor client’s responsive

g) Management of Tubes & Drains

- nasogastric decompression is appropriate on a selective basis for any client with severe nausea, vomiting, or gastric distention as ordered by surgeon
- once symptoms are resolved the nasogastric tube may be clamped to check tolerance
- removal requires gentle withdrawal
- t-tubes used are limited to operative exploration or repair of the common bile duct (CBD)
- the t-tube drains most of the bile produced (600-700ml daily) initially. Decrease in volume of bile drained indicates patency of the distal duct and free flow into the duodenum. Within 7-10 days postoperative a cholangiogram is performed to assess the patency of the CBD and presence of stones. A normal cholangiogram indicates a patent nondilated CBD without leakage and free flow of contrast medium into the duodenum. The tube can be removed by gentle withdrawal: alternatively the tube is clamped and if the client continues to improve, it is removed.
- various tubes and associated devices are used to drain purulent materials, blood or serum from body cavities (ie penrose drains), closed suction drains (ie Jackson-Pratt or Hemovac drains) and sump drains. Remove by gentle withdrawal.

- see “Wound Care” Policy (AC-W001) for specific care of drains.

Management of drains includes ensuring:

- drains are connected to appropriate drainage or suction apparatus
- drains are functioning adequately q8 h and PRN
- drains are secured safely
- amount of drainage is measured q8h & PRN
- notify attending surgeon when there is excessive amounts of drainage

#### h) Nutrition

- mouth care q2h and prn, apply lubricant to lips
- oral intake is frequently limited in the initial postop period
- dietary restriction may include nothing by mouth, provide oral hygiene and ice chips
- auscultate abdomen for return of normal bowel activity q8h & PRN
- if postop nausea, vomiting, or ileus is present, pharmacologic treatment should be considered and oral intake minimized
- dietary progression starting with liquids, proceeding to soft food, to solid foods as tolerated
- document and report abnormal functioning and return of normal bowel activity
- presence of expelling flatus should be noted
- daily weights to monitor status should be considered on post op day 3
- if there is a prolonged delay in enteral nutrition, parenteral nutrition should be considered
- monitoring of dietary intake on bowel surgery clients is essential
- consult dietician as needed

#### i) Mobility

- early postoperative mobilization is essential to prevent thromboembolic, pulmonary complications and orthostatic intolerance
- routinely:

OR day:

- assist with partial sponge bath
- assist client to reposition self q2h & PRN
- encourage leg exercises q2h
- dangle client at bedside evening of surgery or assist up to bathroom as required

Postop day 1

- Assist client to reposition self q2h & PRN
- Continue with DB & C & leg exercises q2h
- Ambulate client QID
- Remove TEDS BID x 10 min

Postop day 2:

- continue with above regime until client increasingly independent
- encourage increasing independence as tolerated
- physio consult when client condition warrants same

k) Hypothermia

- mild hypothermia is a common postoperative complication resulting from blockage of normal autoregulatory processes by anaesthetic agents, heat loss through the open abdomen or chest cavity and the administration of cold fluids
- provide a warm & comfortable environment for the client

l) Cardiac Complications

- if cardiac monitoring becomes a priority then the client should be transferred to a cardiac bed until cardiac status is stable
- variety of cardiovascular complications are commonly associated with general surgical procedures
- factors indicative of elevated risk include ischemic heart disease, CHF, major surgery, diabetes mellitus, renal insufficiency, and poor functional status
- be alert for the presence of angina, cardiac valve disease, and arrhythmias, including heart block, ventricular arrhythmias, and SVT
- signs and symptoms of altered cardiovascular status should be reported to attending physician
- hypertension in the postoperative period frequently occurs secondary to pain or hypoxia therefore initial treatment consists of administering adequate analgesia to control pain and ensure adequate oxygenation
- continued hypertensive readings should be reported to the surgeon

m) Respiratory Complications

- pulmonary complications are common after operative procedures
- postop respiratory complications include:
  - atelectasis
  - aspiration pneumonia
  - other pneumonias

- variety of factors contribute to the development of these complications, some approaches to prevent and treat them are:
  - pre & post operative incentive spirometry as indicated
  - chest physio
  - discontinuing smoking preop
  - underlying infection such as bronchitis or pneumonia should be treated
- routine therapeutic measures include:
  - administration of bronchodilator preop as ordered
  - DB & C q2h when awake
  - incentive spirometry q2h when awake
  - oxygen therapy
  - early mobilization
  - chest physio

n) Thromboembolism

- most common fatal acute pulmonary disorder
- symptoms of pulmonary emboli are:
  - dyspnea
  - tachypnea
  - respiratory rales
  - circulatory collapse characterized by shock or syncope
  - hypoxemia
- treatment is supportive and includes administration of oxygen, adequate maintenance of fluid resusc. and rapid IV anticoagulation
- high risk clients benefit from thrombolytic therapy administered early

o) Deep Vein Thrombosis (DVT)

- routine prophylaxis is justified for all surgical clients who are at high risk for DVT:
  - those older than 40 years
  - obese clients
  - clients with malignant disease
  - clients with prior DVT or pulmonary embolism
  - clients undergoing long complicated operative procedures
- Heparin should be given until the client is ambulatory as ordered by attending surgeon
- TED stockings can also be used to prevent DVT's
- for optimal results, prophylaxis must be started before the operative procedure begins

p) Diabetes Mellitus

- careful management of blood glucose levels necessary to manage blood glucose
- perform glucometer and monitor finger-stick glucose measurements q6h with a sliding scale for regular insulin as ordered by physician
- provide hypoglycemic agents as ordered
- rule of thumb:
  - NIDDM/client on oral hypoglycemic agents, the medication should be held on the day of surgery
  - IDDM/client on insulin, client should receive a dextrose infusion and one half of the total daily regular dose of insulin the morning of the operation
- for IDDM, insulin sliding scale with finger-stick glucose every 6 hours may be ordered

q) Sleep Apnea

- known history or increased risk
- monitor SP0<sub>2</sub> continuously for 24 hours
- monitor must have alarms to alert staff with any desaturation in oxygen
- document SP0<sub>2</sub> every hour x24 hours
- minimize any respiratory depressant meds (for example narcotics) within first 24 hours
- maintain oxygen saturation greater than 95%
- schedule only one known sleep apnea client per slate per site

References:

<http://www.acssurgery.com> - 2003